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A SEQUENTIAL MEDIAN TEST
WITH APPLICATIONS TO CEP TESTING

by

Donald R. Barr

and

Thomas D. Burnett

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A sequential test of a simple hypothesis of the distribution of a random variable against a simple alternate hypothesis is proposed. The test terminates as soon as one of a sequence of sequentially observed sample medians falls outside a "continuation region". The test can also be used for hypotheses concerning the median of the sampled population, and is especially useful when hypothesized distributions may provide poor fit in the tails, in which case "outliers" may seriously degrade the performance

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of traditional procedures such as the Sequential Probability Ratio Test. Applications to testing hypotheses about the circular error probable of weapon systems are discussed, and the tables of stopping bounds for such tests are presented.

# 1. Introduction

Let the components of an IID sequence  $\{X_1, X_2, \dots\}$  be observed sequentially, and let  $M_k$  denote the sample median after 2k-1 observations have been made. We consider a sequential test of  $H_0\colon X\sim F_0$  vs.  $H_1\colon X\sim F_1\preccurlyeq F_0$  based on the statistics  $M_k;\ k=1,2,3,\dots$  and sequences  $\{(a_k,r_k)\}$  of continuation intervals whose end points are "acceptance numbers"  $a_k$  and "rejection numbers"  $r_k$ . We assume  $F_0$  and  $F_1$  are absolutely continuous. The basic idea is to determine  $\{(a_k,r_k)\}$  such that, if the test terminates when  $M_k$  is not between  $a_k$  and  $r_k$  (with appropriate terminal action), the procedure will have prespecified size  $\alpha$  and power  $1-\beta$ .

An example where such a procedure is useful is in testing air-to-ground weapon systems. A standard measure of performance for such systems is the "circular error probable" (CEP) [4], which is defined to be the median radial miss distance. Frequently, it has been assumed that the weapon (say, bomb) impacts under fixed drop conditions follow a bivariate normal distribution, and that by rotating from the "target plane" to a "normal plane" (perpendicular to the bomb trajectory at impact), the distribution is approximately circular normal (bivariate normal with mean  $\underline{0}$  and covariance matrix  $\sigma^2 I$ ). Under these conditions, the radial miss distances are Rayleigh distributed, and the familiar formula CEP =  $\sqrt{2\mathfrak{L}n2}$   $\sigma \approx 1.1774$   $\sigma$  holds. There has be increasing criticism in recent years of using radial miss distributions based on bivariate normal impact distributions in the underlying plane [5]. Common criticisms cite poor fit of the resulting radial model in the tails, especially in the upper tail due to a relatively high frequency of large miss distances in

many data sets [2]. Since there is apparently a serious question about the validity of such models in a substantial number of cases, tests of CEP by corresponding traditional tests of  $\sigma^2$  from an underlying normal model may be of doubtful validity. On the other hand, wide use continues to be made of models based on bivariate normal impact distributions, with corresponding faith in the implications of these models. The sample median, therefore, seems to be an attractive alternative in such cases, because it is generally more robust with respect to poor fit in the tails than are statistics sufficient for  $\sigma^2$ . In addition to its robustness, the proposed procedure has the feature that it can be used with truncated samples with little or no modification, unlike some of its competitors. The procedure is flexible, and can be adapted to meet various constraints. For example, one can accommodate taking observations in batches, also the procedure can be modified so as to preclude termination before some specified number of observations have been taken.

The test we consider is based on medians of odd sized samples because the distributions involved are simpler, from a computational standpoint, than those for arbitrary sized samples. Even so, the situation is challenging, primarily because the sequentially observed sample medians are not independent. In what follows, we discuss a method of determining the acceptance and rejection numbers, and apply the method to the CEP problem introduced above. In section 3, we discuss properties of this "sequential median test" (SMT), and compare it with the sequential probability ratio test (SPRT) for our example. The purpose of this report is to introduce and describe the SMT and illustrate its use in an example; we intend to present elsewhere developments of several aspects of the test which involve

more detailed arguments, including asymptotic behavior and detailed discussion of computational procedures. A description outlining the computation of stopping bounds for the SMT is given in Appendix 1, and a table of such bounds for CEP testing is given in Appendix 2.

# 2. Development

A convenient method of giving the SMT operating characteristics  $1-\alpha \text{ and } \beta \text{ is to design } \{(a_k,\ r_k)\} \text{ so that at each stage } k \text{ , the conditional probabilities of rejection of } H_0 \text{ given a decision on the } k^{th} \text{ stage, are } \alpha \text{ and } 1-\beta \text{ under } H_0 \text{ and } H_1 \text{ , respectively. Let } N=2K-1 \text{ denote the (random) sample size required for termination where } K \text{ denotes the corresponding number of "stages." Let } P_i(i=0,1) \text{ denote the probability distribution induced on measurable subsets of the space } of \text{ sequences } \{x_j\}_{j=1}^\infty \text{ under } H_i \text{ . In order to get a test of size } \alpha \text{ , where } A$ 

$$\alpha = P_0[\text{reject H}_0] = \sum_{k=1}^{\infty} P_0[\text{reject H}_0 \text{ at the k}^{th} \text{ stage}] \cdot P_0[\text{K=k}],$$

it is sufficient that

$$P_0[reject H_0 at the k^{th} stage] = \alpha$$
,

provided the test eventually terminates with probability one under  ${\rm H}_{\rm O}$  . But the latter is

$$P_{0}[M_{k} \geq r_{k} | K=k] = \frac{P_{0}[M_{k} \geq r_{k} | K > k-1]}{P_{0}[M_{k} \geq r_{k} | K > k-1] + P_{0}[M_{k} \leq a_{k} | K > k-1]}$$

which equals  $\alpha$  for all k if and only if

$$\frac{P_0[M_k \ge r_k | K > k-1]}{P_0[M_k \le a_k | K > k-1]} = \frac{\alpha}{1-\alpha}$$
 (1)

for all k . Similarly,  $P_1[reject\ H_0] = 1 - \beta$  provided the test eventually terminates with probability one under  $H_1$  and  $P_1[reject\ H_0]$  at the k<sup>th</sup> stage]  $\equiv$  1 -  $\beta$  which is true if and only if

$$\frac{P_1[M_k \ge r_k \mid K > k-1]}{P_1[M_k \le a_k \mid K > k-1]} = \frac{1-\beta}{\beta}$$
 (2)

We next discuss the existence of sequences  $\{(a_k, r_k)\}$  satisfying equations (1) and (2) for fixed  $\alpha$ ,  $\beta$ ,  $F_0$  and  $F_1$  combinations. Consider first the problem of determining  $a_1$  and  $r_1$ , which reduces to solving the system of equations

$$\frac{1-F_0(r_1)}{F_0(a_1)} = \frac{\alpha}{1-\alpha} ;$$

$$\frac{1-F_1(r_1)}{F_1(a_1)} = \frac{1-\beta}{\beta} .$$
(3)

In order to see that there is not necessarily a solution  $(a_1, r_1)$  to equations (3), consider the particular case of two uniform distributions, say U(0,1) under  $H_0$  and U(0,2) under  $H_1$ . Then equations (3) can be solved to give

$$a_1 = \left(\frac{1-\beta}{\beta} - \frac{\alpha}{1-\alpha}\right)^{-1}$$
 and 
$$r_1 = 1 - \left(\frac{\alpha}{1-\alpha}\right) a_1$$

which satisfy  $0 < a_1 < r_1 < 1$  only for certain  $(\alpha,\beta)$  combinations. Thus, for example, there is no solution in this case for equations (3) with  $\alpha$  =  $\beta$  = .4, whereas there is for  $\alpha$  =  $\beta$  = .2 (in which case  $a_1 \approx .27$  and  $r_1 \approx .93$ ). While it is clear that solutions to (3) may not exist in some cases, for "reasonable" values of  $\alpha$  and  $\beta$  and with distributions such as those in our example, we have not had difficulty in finding solutions. The question of existence of  $\{(a_k, r_k)\}$  satisfying equations (1) and (2) seems difficult to answer in general; we make a rather weak observation about existence of  $\{a_1, r_1\}$  in the following.

Theorem. Let  $F_0 \ge F_1$  be continuous CDF's such that

$$F_1 F_0^{-1} \left( y \left( \frac{1-\alpha}{\alpha} \right) \right) = o \left( 1 - F_1 F_0^{-1} (1-y) \right) \text{ as } y \to 0.$$

Than for any  $\alpha \in (0,1)$  and  $\beta \in (0, F_1 F_0^{-1}(1-\alpha))$  there exists a solution  $(a_1, r_1)$  to the system (3).

<u>Proof.</u> Let  $Y = F_0(X)$ , so Y is uniformly distributed under  $H_0$  and has CDF  $G_1(y) = F_1 F_0^{-1}(y)$ ;  $y \in (0,1)$ , under  $H_1$ . Let  $a^* = F_0(a_1)$  and  $r^* = F_0(r_1)$  so equations (3) may be written

$$\frac{a^*}{1-r^*} = \frac{1-\alpha}{\alpha} \tag{4}$$

and

$$\frac{G_1(a^*)}{1 - G_1(r^*)} = \frac{\beta}{1-\beta} . \tag{5}$$

For any fixed  $\alpha \in (0,1)$ , equation (4) gives  $a^*$  as a linear function of  $r^*$ , with admissible  $(a^*, r^*)$  pairs lying between  $(1-\alpha, 1-\alpha)$  and (0,1). For fixed  $\alpha \in (0,1)$ , and such admissible  $(a^*, r^*)$  pairs, equation (5)

gives  $\beta$  as a function of r,

$$\beta(r^*) = \frac{G_1((1-r^*)(\frac{1-\alpha}{\alpha}))}{1 - G_1(r^*) + G_1((1-r^*)(\frac{1-\alpha}{\alpha}))} . \tag{6}$$

Now  $\beta(r^*)$  varies continuously from  $\beta(1-\alpha) = G_1(1-\alpha)$  down to  $\beta(1^-)$  as  $r^*$  varies from its minimal value  $1-\alpha$  up to 1 (and consequently a varies from  $1-\alpha$  down to 0). But  $\beta(1^-) = \left[1+\lim_{r^*\to 1^-} \frac{1-G_1(r^*)}{G_1\left((1-r^*)\left(\frac{1-\alpha}{\alpha}\right)\right)}\right]^{-1} = 0$ 

under the condition specified above. Consequently, for fixed  $\alpha \in (0,1)$  and any  $\beta \in (0, G_1(1-\alpha))$  there is a pair  $(a^*, r^*)$  with  $0 < a^* < r^* < 1$  satisfying (4) and (5).

Remark. In particular, for  $\beta(1) = 0$  it suffices that  $F_1(F_0^{-1}(1)) < 1$ , since  $F_1 \le F_0$  implies  $0 \le F_1(F_0^{-1}(y)) \le F_0(F_0^{-1}(y)) = y$  for each  $y \in (0,1)$ , and hence  $G_1(0^+) = 0$ . Then expression (6) tends to

$$\beta(1^{-}) = \frac{G_{1}(0^{+})}{1 - G_{1}(1^{-}) + G_{1}(0^{+})} = 0.$$

A similar condition in the lower tail of  $F_1$  can be established using the transformation Z = -Y.

In our example, we consider testing  $H_0$ : CEP =  $C_0$  against  $H_1$ : CEP =  $C_1$  >  $C_0$ . For the purpose of calculating the acceptance and rejection numbers, we imagine the radial miss distance to be Rayleigh distributed, or equivalently, the squared radial miss distance to be distributed exponential with parameter  $\lambda = \ln 2/C_1^2$  and median  $C_1^2$  under  $H_1$ . The assumption of a Rayleigh model for the purpose of determining  $\{(a_k, r_k)\}$ 

is not as strong here as it would be if we were basing a test on  $\hat{\sigma}^2$  , because we rely on  $F_0$  and  $F_1$  primarily for values near the middles of the distribution, especially after the first few stages. Consequently, poor tail fit should not be so serious in this procedure, and it should be quite robust relative to the SPRT, for example. For our example, taking the  $X_i$ to be squared radial miss distances, the values of  $\{(a_k, r_k)\}$  determined by  $\alpha = \beta = .1$  and  $C_1^2 = 2C_0^2$  (we discuss this below) are given in Table 1. Note that both sequences of endpoints are monotone, and that the continuation region is quite short by the 10<sup>th</sup> or 11<sup>th</sup> stage. One might expect this, based on the statistical behavior of sample medians. If there is concern about the adequacy of the Rayleigh model for computing the  $a_{\nu}$ and  $r_k$  for small k , the procedure can be modified so as to preclude termination until several observations have been made. Note, however, that  $r_1$  given in Table 1 is about seven standard deviations above the mean of  $F_0$ , so it is fairly unlikely the test terminates with K = 1. Thus, modification to delay termination in this case may not be worth the trouble.

The algorithm we used to generate the sequence  $\{(a_k, r_k)\}$  of acceptance and rejection numbers for a given  $\alpha$ ,  $\beta$ ,  $F_0$ , and  $F_1$  is recursive in nature, involving transitions between states depicting the frequency of the occurence of observations  $X_1, \ldots, X_n$  in specified intervals on the real line. At the end of the  $k^{th}$  stage, one of the following states may be occupied: an acceptance state defined by

$$A_k = [M_k \le a_k]$$
;

a rejection state defined by

$$R_k = [M_k \ge r_k]$$
;

			Conditional P of Termin	robability ation
Stage	a k	r <sub>k</sub>	H <sub>O</sub> true	H <sub>l</sub> true
1	0.0079	10.6835	0.0061	0.0274
2	0.1772	4.7519	0.0400	0.1009
3	0.4014	3.2658	0.0882	0.1614
4	0.5690	2.6670	0.1150	0.1803
5	0.6939	2.3413	0.1296	0.1872
6	0.7876	2.1405	0.1364	0.1876
7	0.8611	2.0032	0.1410	0.1877
8	0.9201	1.9039	0.1440	0.1872
9	0.9677	1.8296	0.1448	0.1852
10	1.0075	1.7713	0.1463	0.1847
11	1.0419	1.7238	0.1489	0.1850
12	1.0711	1.6854	0.1494	0.1841
13	1.0962	1.6537	0.1499	0.1836
14	1.1180	1.6270	0.1502	0.1830
15	1.1371	1.6042	0.1504	0.1826
16	1.1539	1.5847	0.1504	0.1820
17	1.1688	1.5677	0.1504	0.1821
18	1.1823	1.5527	0.1513	0.1823
19	1.1949	1.5391	0.1534	0.1846
20	1.2059	1.5274	0.1527	0.1838

TABLE 1. Acceptance and rejection numbers  $\{(a_k,r_k)\}$  for a test of exponential distribution with median  $C_0^2=1$  against exponential with median  $C_1^2=2$ , with  $\alpha=\beta=.10$ . The probabilities of termination are conditional, given the test has not previously terminated.

or one of the continuation states, defined by

$$S_{i,j}^{k} = \left[ X_{(i)} \le a_{k+1} < X_{(i+1)} \right] \cap \left[ X_{(2k-1-j)} < r_{k+1} \le X_{(2k-j)} \right] \cap N_{k}; 0 \le i+j \le 2k-1,$$

where  $N_k = \bigcap_{i=1}^k (\bar{A}_i \cap \bar{R}_i)$ , all order statistics are in samples of size 2k-1, and where we define  $X_{(0)} = -\infty$  and  $X_{(2k)} = \infty$ . The range of possible continuation states at the end of the  $k^{th}$  stage and the type of state to which transition may be made on the  $k+1^{st}$  stage are depicted in Figure 1.

The calculation of the probability of transition from state  $S_{i,j}^k$  to  $A_{k+1}$  or  $R_{k+1}$  involves the multinomial distribution associated with the locations of the 2,  $k+1^{st}$  stage observations on the real line. The probabilities of this multinomial are obtained from  $F_0$  or  $F_1$  depending upon the hypothesis being considered. The calculation of the probabilities of transition from  $S_{i,j}^k$  to  $S_{i',j'}^{k+1}$  involves the convolution of the multinomial distribution associated with the location of the 2k-1-i-j observations in the interval  $(a_{k+1}, r_{k+1})$  after the  $k^{th}$  stage and the multinomial distribution of the location of the 2,  $k+1^{st}$  stage observations on the real line. The probabilities of these multinomials are again obtained from  $F_0$  or  $F_1$  as appropriate. Expressions for the transition probabilities are given in Appendix 1.

The process of generating the sequence of acceptance and rejection numbers  $\{(a_k, r_k)\}$  involves the simultaneous solution of equations (1) and (2). The generating process we used is an iterative solution routine for nonlinear systems of equations, requiring an estimate of  $(a_k, r_k)$  in order to compute the probabilities of occupying states  $S_{i,j}^{k+1}$  from which the probabilities in equations (1) and (2) are computed. If the calculated

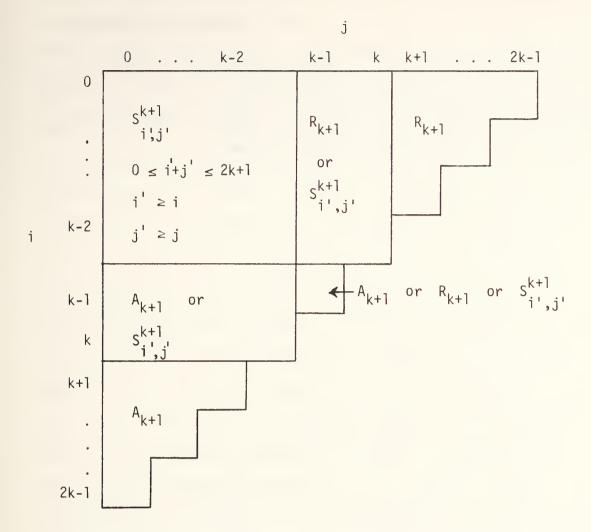


Figure 1. Possible Continuation states at the end of the  $k^{\mbox{th}}$  stage , and the types of states to which transition can be made in the  $k+l\,s\,t$  stage.

decision probabilities do not satisfy equations (1) and (2) with the current estimate of the values of  $a_k$  and  $r_k$ , they are adjusted and the state and decision probabilities are reevaluated. This process is repeated until values of  $(a_k, r_k)$  are obtained to within specified accuracy. A detailed description of the procedure and listing of the computer program we used to generate  $\{(a_k, r_k)\}$  will be made available elsewhere.

# 3. Properties of the SMT

We noted above that the conditions given in (1) and (2) are sufficient to provide an SMT with the desired operating characteristics, provided the test eventually terminates with probability one under both hypotheses. This is evidently the case in our example, where, as may be seen in Table 1, the distributions of N under  $H_0$  and  $H_1$  have geometric upper tails. The plausibility of this behavior can be informally argued along the following lines: Asymptotically,  $M_k$  is normal with mean  $C_i^2$  and variance proportional to  $(2k-1)^{-1}$  [7]. The Asymptotic conditional distribution of  $M_k$ , given the test has not terminated previously, is normal truncated below  $a_{k-1}$  and above  $r_{k-1}$  . Consider the problem of solving equations (1) and (2) for  $a_k$  and  $r_k$ using for  $F_0$  and  $F_1$  the asymptotic normal distributions truncated at  $a_{k-1}$ and  $r_{k-1}$  . For large k , this problem changes from one stage to the next only by a scale factor proportional to  $\sqrt{2k-1}$ . Evidence of this can be seen in Table 1, where the quantities  $(r_k - a_k)\sqrt{2k-1}$  appear to be converging for increasing k . If the quantities are measured in terms of corresponding asymptotic standard deviation units, equations (1) and (2) and hence their solutions should thus become essentially unchanging with increasing k . Following this line of reasoning it can be shown, for example, that the sequence of continuation intervals started in Table 1 converges to the point  $a_{\infty} = 4/3$  as  $k \to \infty$ .

Assuming the distribution of N has a geometric upper tail under a given distribution of X, it is easy to compute  $E_i(N)$  (approximately) for our example. This is accomplished by a standard technique involving the initial and tail conditional expectations taken with Table 1 and a geometric

mass function, respectively. In order to assess the behavior of E(N) under distributions of X other than  $F_0$  and  $F_1$ , we simulated the test developed for our example under a variety of assumed exponential distributions corresponding to medians  $C^2$  ranging between .5 and 3. As expected, in each case the conditional probabilities of acceptance and rejection, and hence of termination, given the test enters stage k, apparently converge to positive values. The geometric distribution was therefore assumed to fit in the upper tail for our calculation of E(N), V(N) and operating characteristic  $L(C^2)$  values.

The efficiency of this SMT relative to the SPRT in our example, in terms of expected sample sizes, variance in sample sizes, and operating characteristics, is demonstrated in Figures 2, 3, 4. The values of E(N),  $L(C^2)$  and V(N) shown for the SPRT, taken from Gavlak [3], are exact (rather than Wald's approximations) for an SPRT of exponential hypotheses with stopping bounds given by the usual approximations  $(1-\beta)/\alpha = 9$  and  $\beta/(1-\alpha) = 1/9$ .

For comparison, a third sequential test, an SPRT based on Bernoulli random variables which indicate whether or not each impact is within  $C_0$  units of the target, was considered. The hypotheses on  $C^2$  under consideration above reduce to  $H_0$ : p=1/2 vs.  $H_1$ :  $p=1-2^{-C_0^2/C_1^2}\approx .2929$ . A discussion of why this procedure should be robust, even though it involves the assumed Rayleigh distribution through computation of p values corresponding to p values, is given by Barr [1]. It is clear that this procedure, which we henceforth call the SPRT (Bernoulli) is not as efficient as the SPRT based on the exponential (SPRT (exponential)) because the indicator random variables are not sufficient for p in the exponential

family under consideration. In short, the SPRT (Bernoulli) procedure should offer a robust but fairly inefficient procedure for testing hypotheses about CEP, and it seemed to be of some interest to see how well it performed relative to the SMT and SPRT (exponential), under exponential conditions. Values of E(N) and  $L(C^2)$  shown in Figures 2 and 3 were computed using the Wald approximations [8]; evaluations of V(N) in the SPRT (Bernoulli) procedure are apparently not available for the example case.

As can be seen in Figure 2, there is not a great deal of difference in the O.C.'s of the three procedures. Figure 3 shows that the SMT requires expected sample sizes intermediate between those of the other two tests, and that it is reasonably efficient relative to the SPRT (exponential). Figure 4 suggests that the standard deviation in sample size for the SMT is roughly proportional to E(N), as has been suggested for the SPRT [6].

Because of the apparent reasonable performance of the SMT relative to the SPRT, and because of presumed robustness, we feel the SMT has potential for use in situations such as the CEP testing problem we have described. In order to make the procedure easily accessable for CEP Testing, in Appendix 2 we have tabulated continuation intervals, as in Table 1 above, together with  $E_i(N)$  for a number of  $C_0^2/C_1^2$  ratios and  $\alpha$ ,  $\beta$  combinations. This can be done conveniently by taking  $C_0^2=1$  and letting  $C_1^2$  vary, since  $C_0^2$  is a scale parameter in the present application.

Figure 2. 0.C. Curves for Three Sequential Procedures

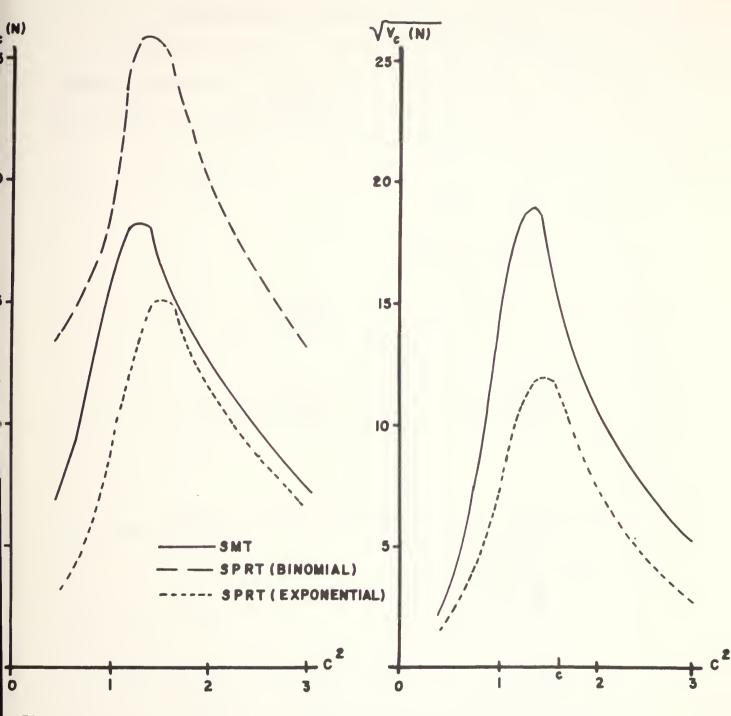


Figure 3. Expected Sample Sizes.

Figure 4. Standard Deviation of Sample Sizes.

# APPENDIX 1: Computation of Termination Bounds

The following are expression giving decision and transition probabilities. The subscript  $h \in \{0,1\}$  denotes calculations performed under the conditions specified by  $H_0$  and  $H_1$ , and  $N_{k-1} = \bigcap_{i=1}^{K} (\bar{A}_i \cap \bar{R}_i)$  is the event that the test enters stage k.

For 
$$k = 1$$
:  $P_h(A_1) = F_h(a_1)$   

$$P_h(R_1) = 1 - F_h(r_1)$$
.

For  $k \ge 2$ :  $P_h(A_k \cap N_{k-1}) = \sum_{\substack{i \ 0 \le i+j \le 2k-3}} \frac{P_h(S_{i,j}^{k-1})}{P_h(S)} P_h(s)$   

$$P_h(R_k \cap N_{k-1}) = \sum_{\substack{0 \le i+j \le 2k-3}} \frac{P_h(S_{i,j}^{k-1})}{P_h(S)} P_h(n)$$

where

$$P_{h}(\xi) = \begin{cases} 0 & i=0,1,...,k-3 \\ (F_{h}(a_{k}))^{2} & i=k-2 \\ (F_{h}(a_{k}))^{2} + \binom{2}{1} F_{h}(a_{k})(1-F_{h}(a_{k})) & i=k-1 \\ 1 & i=k,...,2k-3 \end{cases}$$

$$P_{h}(\eta) = \begin{cases} 0 & j=0,1,...,k-3 \\ (1-F_{h}(r_{k}))^{2} & j=k-2 \\ (1-F_{h}(r_{k}))^{2} + \binom{2}{1}(1-F_{h}(r_{k}))F_{h}(r_{k}) & j=k-1 \\ 1 & j=k,...,2k-3 \end{cases}$$

and

$$P_{h}(s) = \sum_{\substack{i \\ 0 \le i+j \le 2k-3}} P_{h}(s_{i,j}^{k-1}) .$$

For 
$$k = 1$$
:  $P_h(S_{i,j}^1) = (F_h(a_2) - F_h(a_1))^i (F_h(r_2) - F_h(a_2))^{1-i-j}$ .

$$(F_h(r_1)-F_h(r_2))^j = 0 \le i+j \le 1$$
.

For 
$$k \ge 2$$
:  $P_h(S_{i+s,j+t}^k \mid S_{i,j}^{k-1}) =$ 

$$\sum_{\substack{s_1 = \max(0, s - v) \\ s_k + t_1 + v \approx + t}}^{\min(s, 2)} \sum_{\substack{t_1 = \max(0, t - v) \\ s_k + t_1 + v \approx + t}}^{\min(2 - s, t)} \left(s_1, t_1, 2 - s_1 - t_1\right) (*) \left(F_h(r_{k+1}) - F_h(a_{k+1})\right)^{2 - s_1 - t_1} (**).$$

$$(s-s_1, t-t_1, v^*) \frac{(F_h(a_{k+1})-F_h(a_k))^{s-s_1}(F_h(r_{k+1})-F_h(a_{k+1}))^{v^*}(F_h(r_k)-F_h(r_{k+1}))}{(F_h(r_k)-F_h(a_k))^{v}}$$

where

$$v^* = v - (s-s_1) - (t-t_1)$$
  
 $v = 2k-3-i-j \ge 0$   
 $0 \le s+t \le 2k-3-i-j$   
 $i \le k-1$ ;  $j \le k-1$   
 $s \ge 0$ ;  $t \ge 0$ 

and

$$(*) = \begin{cases} (F_{h}(a_{k+1}) - F_{h}(a_{k}))^{S_{1}} & i = k-1 \\ i & i = k-2 ; s_{1} = 0 \end{cases}$$

$$(*) = \begin{cases} F_{h}(a_{k+1}) & i = k-2 ; s_{1} = 1 \\ F_{h}(a_{k+1})^{2} - F_{h}(a_{k})^{2} & i = k-2 ; s_{1} = 2 \\ (F_{h}(a_{k+1}))^{S_{1}} & i \leq k-3 \end{cases}$$

and

$$(**) = \begin{cases} (F_{h}(r_{k}) - F_{h}(r_{k+1}))^{t_{1}} & j=k-1 \\ 1 & j=k-2 ; t_{1}=0 \\ (1 - F_{h}(r_{k+1})) & j=k-2 ; t_{1}=1 \\ (1 - F_{h}(r_{k+1}))^{2} - (1 - F_{h}(r_{k}))^{2} & j-k-2 ; t_{1}=2 \\ (1 - F_{h}(r_{k+1}))^{t_{1}} & j \leq k-3 \end{cases}$$

# APPENDIX 2: Table of Stopping Bounds and Operating Characteristics

In what follows, we give stopping bounds (for the first 20 stages) and probabilities of acceptance and rejection at each stage k, for testing  $H_1$ : CEP = C1 vs.  $H_2$ : CEP = C2 , for C1 = 1.0 and C2 = 1.5(.5)4.0 . The test is based on the assumption that radial miss distance is Rayleigh distributed; alternatively, with squared miss distanges, the tests can be interpreted as tests of  $H_1$ : X ~ exponential  $\ln 2/(C(1))^2$  vs.  $H_2$ : X ~ exponential  $\ln 2/(C(2))^2$  , where X is squared radial miss distance. The test terminates at the first stage for which the median of the sample of squared radial miss distances falls outside the interval (A(K) , R(K)) with corresponding terminal decision. For C1 hypotheses other than 1.0, transform the problem to a C1 = 1.0 case by a change in scale. For each hypothesis pair, the bounds and operating characteristics are tabulated for combinations of  $\alpha$  = .05(.05).20 and  $\beta$  = .05(.05).20

C1 = 1.0 C2 = 1.5 ALPHA = 0.05 BETA = 0.05

#### THE RESULTS OF THIS CASE ARE

#### PROBABILITY OF THE EVENT K A(K) P(K) REJ/h1 ACC/h1 PEJ/h2 ACC/h2 0.00000223.760000 0.000000 0.000001 0.000017 0.000001 1 0.00296011.064365 0.000001 0.000025 0.000216 0.000011 2 0.034957 6.772050 0.000007 0.000131 0.000770 0.000040 3 0.100074 5.007466 0.000029 0.000569 0.002380 0.000124 4 0.189613 3.938432 0.000112 0.002080 0.006634 0.000355 5 6 0.272377 3.349053 0.000226 0.004223 0.011123 0.000596 0.348461 2.957808 0.000379 0.007075 0.016137 0.000865 7 0.415614 2.683862 0.000544 0.010156 0.020761 0.001112 8 0.471196 2.493512 0.000648 0.012393 0.023315 0.001237 0.523768 2.334352 0.000837 0.015910 0.028061 0.001483 0.567326 2.215607 0.000929 0.017714 0.029847 0.001558 9 10 11 0.608612 2.112753 0.001105 0.020949 0.033671 0.001765 12 0.642918 2.033406 0.001158 0.022048 0.034342 0.001788 13 14 0.675547 1.962702 0.001303 0.024728 0.037219 0.001948 0.702766 1.906545 0.001320 0.025117 0.037139 0.001923 15 16 0.728759 1.855463 0.001431 0.027186 0.039253 0.002036 17 0.753561 1.809326 0.001556 0.029525 0.041365 0.002185 18 0.774320 1.772024 0.001542 0.029323 0.040566 0.002138 0.793000 1.739214 0.001563 0.029699 0.040781 0.002129 19 0.810942 1.708715 0.001636 0.031079 0.042044 0.002201 20

#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 1.5 ALPHA = 0.05 BETA = 0.10

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE LVENT A(K) R(K) RLJ/H1 ACC/H1 REJ/H2 ACC/H2 0.00001820.497277 0.000001 0.000013 0.000077 U.000009 3 0.165225 4.344234 0.000175 0.003378 0.007162 0.000792 5 0.273327 3.49259\$ 0.000460 0.008579 0.014765 0.001652 6 0.365029 3.013598 0.000739 0.013785 0.020620 0.002306 7 0.445141 2.701995 0.001037 0.019385 0.026205 0.002930 8 0.510744 2.489232 0.001214 0.023291 0.029095 0.003252 0.570255 2.319797 0.001496 0.028472 0.033801 0.003755 0.620796 2.191902 0.001675 0.031926 0.036238 0.004034 9 10 0.665299 2.089179 0.001856 0.035332 0.038696 0.004321 11 0.702022 2.009744 0.001907 0.036298 0.039034 0.004304 12 0.736716 1.939553 0.002096 0.039778 0.041675 0.004616 13 14 0.767458 1.881252 0.002195 0.041740 0.042634 0.00477315 0.792995 1.834412 0.002174 0.041336 0.041935 0.004640 0.817292 1.791698 0.002291 0.043525 0.043479 0.004819 0.838982 1.755000 0.002330 0.044292 0.043700 0.004852 0.858391 1.723081 0.002352 0.044700 0.043752 0.004844 0.876367 1.694385 0.002401 0.045635 0.044238 0.004904 16 17 18 19 20 0.892506 1.669198 0.002407 0.045734 0.044085 0.004872

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#### C1 = 1.0 C2 = 1.5 ALPHA = 0.05 BETA = 0.15

#### THE RESULTS OF THIS CASE ARL

```
PROBABILITY OF THE EVENT
        A(K)
                         REJ/H1 ACC/H1 REJ/H2 ACC/H2
                 R(K)
     0.00007418.495894 0.000003 0.000051 0.000194 0.000034
 1
      0.018171 8.461773 0.000048 0.000930 0.002362 0.000416
 3
     0.103638 5.316592 0.000150 0.002907 0.005249 0.000926
     0.223371 3.963619 0.000475 0.009097 0.012923 0.002268
 4
     0.341488 3.240609 0.000995 0.018565 0.022313 0.003947 0.438051 2.830775 0.001415 0.026399 0.028409 0.005035
 6
     0.515104 2.572649 0.001644 0.031636 0.031438 0.005554
7
     0.585505 2.370797 0.002072 0.039398 0.037193 0.006548
8
9
     0.642751 2.227173 0.002260 0.043148 0.039056 0.006884
     0.692783 2.113486 0.002493 0.047460 0.041615 0.007345
10
11
     0.735179 2.024648 0.002620 0.049862 0.042676 0.007532
     0.772460 1.951636 0.002755 0.052396 0.043919 0.007766
12
13
      0.804263 1.892460 0.002799 0.053226 0.044046 0.007750
     0.833331 1.841083 0.002919 0.055487 0.045187 0.007978
14
15
     0.859088 1.797540 0.002977 0.056584 0.045475 0.008055
     0.881971 1.760201 0.003012 0.057242 0.045558 0.008073
16
17
     0.902355 1.727881 0.003028 0.057551 0.045487 0.008043
     0.920561 1.699667 0.003030 0.057574 0.045306 0.007970
18
19
     0.937921 1.673628 0.003117 0.059208 0.046112 0.008156
     0.953459 1.650884 0.003114 0.059179 0.045802 0.008112
20
```

#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 1.5 ALPHA = 0.05 BETA = 0.20

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE LVENT REJ/H1 ACC/H1 REJ/H2 ACC/H2 A(K) R(K) К 0.00021116.986406 0.000008 0.000146 0.000390 0.000097 0.030302 7.735044 0.000132 0.002544 0.004586 0.001144 0.142637 4.891372 0.000358 0.006899 0.009044 0.002260 0.278521 3.702887 0.000927 0.017869 0.018952 0.004728 0.404216 3.062655 0.001700 0.031702 0.029460 0.007368 6 0.501168 2.707125 0.002129 0.040101 0.034093 0.008535 0.580697 2.470211 0.002459 0.047096 0.037636 0.009403 7 3 0.649438 2.293165 0.002854 0.054382 0.041725 0.010405 9 0.706988 2.161884 0.003103 0.059143 0.043820 0.010987 0.754572 2.062225 0.003230 0.061508 0.044627 0.011144 10 0.796140 1.981367 0.003394 0.064545 0.045918 0.011477 11 12 0.831373 1.916639 0.003447 0.065559 0.046033 0.011466 0.863377 1.861125 0.003593 0.068302 0.047169 0.011816 1.3 0.890654 1.815696 0.003593 0.068312 0.046752 0.011689 0.914795 1.776803 0.003620 0.068807 0.046764 0.011649 0.937262 1.741980 0.003730 0.070751 0.047574 0.011909 0.956561 1.712858 0.003676 0.069863 0.046729 0.011666 0.974327 1.686706 0.003715 0.070594 0.046939 0.011710 14 15 16 17 18 19 0.990701 1.663250 0.003754 0.071332 0.047092 0.011781 20 1.005336 1.642657 0.003735 0.070974 0.046695 0.011659

#### C1 = 1.0 C2 = 1.5 ALPHA = 0.10 LETA = 0.05

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE LVENT REJ/H1 ACC/H1 REJ/H2 ACC/H2 (X) A R(K) 0.00000920.498596 0.000001 0.000006 0.000077 0.000004 1 2 0.006234 9.446847 0.000012 0.000111 0.000957 0.000050 0.052139 5.890525 0.000046 0.000418 0.002483 0.000129 3 0.135687 4.318229 0.000187 0.001700 0.007486 0.000387 4 0.233701 3.449979 0.000530 0.004724 0.016147 0.000863 5 0.318574 2.967974 0.000893 0.007972 0.023158 0.001238 6 7 0.394297 2.644493 0.001316 0.011752 0.030227 0.001618 8 0.458622 2.420025 0.001680 0.015018 0.035404 0.001389 9 0.515040 2.251168 0.002048 0.018319 0.040245 0.002151 0.561492 2.127667 0.002225 0.020095 0.042056 0.002228 10 0.602589 2.027135 0.002465 0.022210 0.044971 0.002346 11 0.641356 1.940102 0.002826 0.025374 0.049229 0.002597 12 0.673428 1.872917 0.002891 0.026058 0.049245 0.002594 13 0.701961 1.816036 0.003020 0.027197 0.050462 0.002638 14 15 0.729048 1.764938 0.003266 0.029375 0.053056 0.002802 0.751611 1.723979 0.003231 0.029103 0.052035 0.002727 16 17 0.773133 1.686399 0.003404 0.030628 0.053825 0.002831 0.791144 1.655675 0.003321 0.029900 0.052455 0.002718 18 0.809184 1.626115 0.003518 0.031753 0.054643 0.002857 19 20 0.825376 1.600215 0.003564 0.032079 0.054751 0.002865

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 1.5 ALPHA = 0.10 LETA = 0.10

#### THE PLSULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT A(K) R(K) RLJ/H1 ACC/H1 PEJ/H2 ACC/H2 0.00008217.264703 0.000006 0.000057 0.000343 0.000038 1 0.018979 7.853687 0.000112 0.001013 0.004116 0.000454 3 0.104816 4.930208 0.090331 0.002994 0.008633 0.000956 0.220184 3.694028 0.000953 0.000593 0.019464 0.002145 0.332203 3.034039 0.001856 0.016566 0.031418 0.003517 5 0.423705 2.655391 0.002568 0.022931 0.038898 0.004357 6 7 0.500695 2.402312 0.003204 0.028667 0.044955 0.005037 0.563180 2.228095 0.003563 0.032196 0.047833 0.005329 9 0.617649 2.093126 0.004018 0.036211 0.051737 0.005736 10 0.665183 1.987032 0.004410 0.039734 0.054693 0.006107 0.704076 1.906369 0.004502 0.040566 0.054792 0.006069 0.739412 1.837880 0.004795 0.043166 0.056986 0.006331 0.770526 1.781106 0.004972 0.044772 0.057934 0.006475 11 13 0.796223 1.735889 0.004890 0.044038 0.056716 0.006261 14 15 0.820535 1.694940 0.005113 0.046003 0.058410 0.006463 16 0.842120 1.659955 0.005172 0.046558 0.052477 0.006482 17 0.861336 1.629722 0.005196 0.046776 0.058340 0.006455 18 0.879044 1.602690 0.005282 0.047542 0.053773 0.006516 19 0.894865 1.579094 0.005276 0.047492 0.058422 0.006465 20 0.909960 1.557238 0.005412 0.048705 0.059291 0.006609

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C1 = 1.0 C2 = 1.5 ALPHA = 0.10 ETA = 0.15

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT A(K) R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 0.00033115.261274 0.000025 0.000229 0.000865 0.000153 0.037685 6.878825 0.000430 0.003898 0.009983 0.001758 3 0.158328 4.383665 0.000995 0.009037 0.017056 0.002999 4 0.293496 3.349985 0.002260 0.020504 0.031589 0.005560 5 0.412462 2.799892 0.003649 0.032559 0.044116 0.007805 0.505502 2.482109 0.004488 0.040076 0.050106 0.008858 0.580136 2.273585 0.004995 0.045237 0.053378 0.009426 6 7 0.644409 2.117084 0.005658 0.051032 0.057893 0.010221 8 9 0.696281 2.003568 0.005893 0.053172 0.058787 0.010330 0.741316 1.913153 0.006244 0.056249 0.060766 0.010685 10 11 0.780508 1.840259 0.006524 0.058757 0.062083 0.010997 0.812516 1.783599 0.006456 0.058155 0.060960 0.010709 0.842467 1.733445 0.006793 0.061110 0.062961 0.011148 0.867078 1.693669 0.006643 0.059818 0.061352 0.010788 0.890251 1.657723 0.006877 0.061879 0.062695 0.011083 12 13 14 15 0.910732 1.627058 0.006907 0.062179 0.062440 0.011078 16 0.928888 1.600576 0.006901 0.062121 0.062044 0.011003 17 0.945031 1.577501 0.006867 0.061813 0.061552 0.010875 18 19 0.959893 1.556727 0.006911 0.062207 0.061643 0.010886 20 0.973161 1.538463 0.006858 0.061730 0.061078 0.010737

#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 1.5 ALPHA = 0.10 LETA = 0.20

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT REJ/H1 ACC/H1 REJ/H2 ACC/H2 R(K)  $\mathbb{K}$ A(K) 0.00094613.744968 0.000073 0.000656 0.001744 0.000437 1 0.062348 6.172629 0.001139 0.010330 0.018860 0.004706 2 0.215243 3.990675 0.002174 0.019692 0.027362 0.006815 3 0.363407 3.107778 0.004077 0.036818 0.043365 0.010798 5 0.486182 2.636653 0.005765 0.051483 0.054793 0.013737 6 0.577702 2.366600 0.006417 0.057792 0.057938 0.014471 0.653045 2.179318 0.007106 0.064187 0.061731 0.015385 7 0.715271 2.043179 0.007623 0.068765 0.064169 0.016011 0.766895 1.940922 0.007952 0.071679 0.065356 0.016348 0.809947 1.861903 0.008127 0.073225 0.065676 0.016429 9 10 11 0.846050 1.799358 0.008183 0.073705 0.065419 0.016294 0.878507 1.746336 0.008460 0.076157 0.066576 0.016691 12 13 0.905900 1.703439 0.008418 0.075797 0.065741 0.016468 0.929922 1.667104 0.008443 0.076010 0.065506 0.016377 0.951057 1.636063 0.008438 0.075953 0.065140 0.016239 14 15 0.970314 1.608664 0.008531 0.076784 0.065380 0.016334 16 17 0.987334 1.585015 0.008497 0.076485 0.064861 0.016183 1.002914 1.563899 0.008552 0.076973 0.064914 0.016224 18 19 1.016747 1.545459 0.008490 0.076417 0.064300 0.016028 20 1.029865 1.528420 0.008621 0.077580 0.064819 0.016249

C1 = 1.0 C2 = 1.5 ALPHA = 0.15 BETA = 0.05

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT A(K) R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 0.00002218.496349 0.000003 0.000015 0.000194 0.000010  $\mathbb{R}$ 0.009910 8.446603 0.000049 0.000279 0.002395 0.000125 0.068309 5.289719 0.000159 0.000904 0.005441 0.000281 3 0.162401 3.905523 0.000555 0.003152 0.014306 0.000739 4 5 0.263984 3.154960 0.001312 0.007392 0.026592 0.001421 0.348624 2.736390 0.001979 0.011154 0.034833 0.001857 6 0.423461 2.451590 0.002729 0.015395 0.043115 0.002312 7 8 0.486042 2.253757 0.003306 0.018640 0.048441 0.002593 0.539539 2.106874 0.003798 0.021461 0.052628 0.002816 9 0.584995 1.994587 0.004162 0.023513 0.055387 0.002945 10 11 0.622439 1.909345 0.004266 0.024216 0.055721 0.002906 12 0.657742 1.834501 0.004715 0.026715 0.059647 0.003107 15 0.739594 1.678975 0.005089 0.028856 0.061142 0.003160 20 0.830994 1.529449 0.905526 0.031322 0.063026 0.003261

#### THIS CASE MAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 1.5 ALPHA = 0.15 BETA = 0.10

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT A(K) R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 0.00020815.262281 0.000025 0.000144 0.000865 0.000096 1 0.029749 6.875925 0.000432 0.002454 0.010009 0.001104 0.135034 4.361236 0.001042 0.005927 0.017578 0.001936 0.259327 3.313906 0.002480 0.014121 0.033559 0.003706 3 0.372113 2.755506 0.004167 0.023503 0.047977 0.005373 5 0.461363 2.433262 0.005265 0.029687 0.055313 0.006193 0.535148 2.216746 0.006175 0.034875 0.060970 0.006824 7 8 0.594672 2.066248 0.006638 0.037750 0.063234 0.007037 0.646278 1.949232 0.007271 0.041253 0.066877 0.007426 0.691089 1.856939 0.007801 0.044249 0.069507 0.007788 0.727591 1.786708 0.007844 0.044502 0.068881 0.007671 0.759593 1.728506 0.008059 0.045688 0.069764 0.007735 9 10 11 12 13 0.787725 1.679853 0.008219 0.046592 0.070278 0.007777 14 0.812526 1.638759 0.008325 0.047190 0.070479 0.007785 15 0.834452 1.603714 0.008382 0.047508 0.070425 0.007757 16 0.855150 1.571963 0.008692 0.049249 0.071962 0.008004 17 0.872304 1.546211 0.008436 0.047814 0.069877 0.007703 18 0.888594 1.522423 0.008625 0.048874 0.070865 0.007825 0.903115 1.501681 0.008591 0.048685 0.070333 0.007749 19 20 0.916938 1.482462 0.008774 0.049718 0.071186 0.007895

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C1 = 1.0 C2 = 1.5 ALPHA = 0.15 BETA = 0.15

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT A(K) R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 0.00083513.258364 0.000102 0.000579 0.002184 0.000386 0.058212 5.928699 0.001593 0.009052 0.023467 0.004119 2 0.202790 3.830974 0.002978 0.016920 0.033133 0.005820 3 0.342965 2.985346 0.005471 0.031100 0.051284 0.009013 5 0.459440 2.533050 0.007652 0.043192 0.064016 0.011326 6 0.549798 2.264350 0.008891 0.050160 0.069675 0.012350 0.619157 2.090887 0.009298 0.052928 0.070766 0.012420 0.680434 1.956048 0.010397 0.058950 0.076092 0.013429 0.729505 1.858442 0.010638 0.060356 0.076158 0.013460 0.770466 1.782749 0.010842 0.061480 0.076443 0.013462 8 9 10 0.805977 1.721212 0.011121 0.063044 0.077239 0.013621 11 0.836858 1.670588 0.011325 0.064192 0.077613 0.013741 12 13 0.862939 1.629514 0.011246 0.063747 0.076616 0.013509 14 0.885824 1.594679 0.011264 0.063840 0.076330 0.013400 15 0.907267 1.563373 0.011611 0.065791 0.077687 0.013761 0.924916 1.538105 0.011263 0.063834 0.075450 0.013242 16 17 0.941566 1.514929 0.011476 0.065028 0.076323 0.013423 0.956314 1.494835 0.011414 0.064682 0.075683 0.013286 18 19 0.970266 1.476345 0.011622 0.065856 0.076428 0.013509 0.982659 1.460223 0.011550 0.065453 0.075709 0.013391 20

#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 1.5 ALPHA = 0.15 BETA = 0.20

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT A(K) R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 0.00237111.753026 0.000290 0.001642 0.004378 0.001095 0.095840 5.239711 0.004104 0.023358 0.043254 0.010792 2 0.272979 3.464940 0.006044 0.034439 0.050078 0.012506 3 0.422586 2.759522 0.009242 0.052659 0.067040 0.016734 5 0.541229 2.375632 0.011702 0.066022 0.077821 0.019505 6 0.628565 2.151240 0.012448 0.070562 0.079535 0.019874 0.699678 1.994744 0.013333 0.075732 0.082549 0.020662 0.756888 1.882119 0.013787 0.078220 0.083456 0.020878 7 8 0.804014 1.797024 0.014082 0.079856 0.083815 0.020971 9 10 0.843068 1.731035 0.014179 0.080387 0.083433 0.020829 11 0.876706 1.677371 0.014387 0.081548 0.083687 0.020927 12 0.905784 1.633219 0.014521 0.082302 0.083615 0.020975 0.930212 1.597358 0.014346 0.081310 0.082304 0.020548 13 14 0.952224 1.566187 0.014518 0.082272 0.082657 0.020678 0.971473 1.539707 0.014481 0.082067 0.082058 0.020522 0.988367 1.516973 0.014396 0.081586 0.081357 0.020285 1.003728 1.496796 0.014466 0.081976 0.081367 0.020303 15 16 17 1.017716 1.478854 0.014536 0.082375 0.081339 0.020354 18 19 1.030075 1.463235 0.014419 0.081712 0.080547 0.020110 20 1.041387 1.449171 0.014434 0.081796 0.080393 0.020067

C1 = 1.0 C2 = 1.5 ALPHA = 0.20 BETA = 0.05

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT A(K) R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 0.013961 7.703055 0.000138 0.000552 0.004723 0.000247 0.083562 4.839101 0.000398 0.001593 0.009691 0.000501 3 4 0.185737 3.596762 0.001229 0.004928 0.022778 0.001190 5 0.287565 2.938931 0.002484 0.009900 0.037300 0.001991 6 0.372293 2.561574 0.003542 0.014119 0.046759 0.002498 7 0.444228 2.309868 0.004514 0.018007 0.054460 0.002905 0.504695 2.131810 0.005290 0.021105 0.059839 0.003182 3 0.557075 1.996977 0.006023 0.024059 0.064612 0.003453 9 12 0.671111 1.748689 0.007034 0.028109 0.069554 0.003661 13 0.700126 1.693630 0.007302 0.029194 0.070905 0.003722 14 0.725993 1.646923 0.007526 0.030097 0.071919 0.003773 15 0.748947 1.607207 0.007662 0.030656 0.072333 0.003789 0.769367 1.573098 0.007745 0.030985 0.072455 0.003780 0.788760 1.541913 0.008075 0.032297 0.074315 0.003912 17 18 19 0.804926 1.516516 0.007841 0.031371 0.072191 0.003759 0.820361 1.492899 0.008043 0.032170 0.073392 0.003821 20 0.835091 1.471030 0.008295 0.033179 0.074717 0.003929

#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 1.5 ALPHA = 0.20 BETA = 0.10

#### THE RESULTS OF THIS CASE ARE

PROBADILITY OF THE LVENT A(K) R(K) REJ/H1 ACC/L1 PEJ/H2 ACC/L2 0.00041713.754921 0.000072 0.000239 0.001736 0.000193 0.041435 6.153664 0.001169 0.004688 0.019189 0.002119 2 0.162931 3.938135 0.002415 0.009684 0.029315 0.003238 3 0.290699 3.037322 0.004852 0.019477 0.048519 0.005346 5 0.402497 2.550615 0.007365 0.029382 0.064113 0.007158 6 0.489635 2.266757 0.008820 0.035177 0.070993 0.007936 0.560516 2.075877 0.009933 0.039636 0.075912 0.008478 7 0.619290 1.938391 0.010777 0.043076 0.079269 0.008881 0.666647 1.838300 0.011039 0.044208 0.079541 0.008846 9 0.707706 1.758216 0.011556 0.046246 0.081540 0.009047 10 0.743393 1.693342 0.011974 0.047914 0.082884 0.009232 11 0.774500 1.640046 0.012290 0.049163 0.083677 0.009374 12 0.799953 1.598143 0.012014 0.048072 0.081587 0.009042 13 14 0.823820 1.560519 0.012458 0.049828 0.083478 0.009293 15 0.844826 1.528631 0.012538 0.050157 0.083280 0.009301 0.863374 1.501310 0.012544 0.050181 0.082837 0.009249 16 0.879801 1.477695 0.012495 0.049983 0.082233 0.009152 17 0.894394 1.457121 0.012403 0.049613 0.081526 0.009016 18 19 0.908240 1.438093 0.012634 0.050538 0.082436 0.009150 20 0.920572 1.421455 0.012554 0.050218 0.081717 0.009053

28

C1 = 1.0 C2 = 1.5 ALPHA = 0.20 BETA = 0.15

#### THE RESULTS OF THIS CASE ARE

```
PROBABILITY OF THE LVENT
        A(K) R(K)
 K
                          REJ/H1 ACC/H1 REJ/H2 ACC/H2
     0.00167211.753435 0.000290 0.001158 0.004378 0.000772
      0.080196 5.229180 0.004163 0.016688 0.043662 0.007666
      0.241144 3.436450 0.006386 0.025631 0.051943 0.009122
 3
      0.382975 2.718170 0.010197 0.040885 0.071551 0.012573
      0.497173 2.329700 0.013172 0.052548 0.083989 0.014901
 6
      0.583300 2.099223 0.014486 0.057757 0.087778 0.015567
 7
      0.651223 1.944799 0.015214 0.061022 0.089507 0.015863
      0.707006 1.831447 0.015933 0.063796 0.091477 0.016170 0.753057 1.745918 0.016335 0.065384 0.092103 0.016276 0.791295 1.679648 0.016488 0.065981 0.091850 0.016184
 8
10
      0.824287 1.625743 0.016768 0.067091 0.092294 0.016280
11
      0.852852 1.581373 0.016958 0.067845 0.092359 0.016339
13
      0.877674 1.544418 0.017058 0.068243 0.092113 0.016336
      0.893630 1.514110 0.016802 0.067220 0.090563 0.015959
14
15
      0.917608 1.487486 0.016953 0.067317 0.090845 0.016004
16
      0.934283 1.464658 0.016871 0.067487 0.090138 0.015834
17
      0.949933 1.443877 0.017205 0.068818 0.091117 0.016122
      0.963725 1.425960 0.017122 0.068490 0.090332 0.016007
18
19
     0.975923 1.410350 0.016973 0.067895 0.089443 0.015800
20
     0.987097 1.396281 0.016992 0.067971 0.089298 0.015762
```

#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 1.5 ALPHA = 0.20 BETA = 0.20

#### THE RESULTS OF THIS CASE ARE

```
PROBABILITY OF THE EVENT
        A(K) R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2
K
     0.00475510.247481 0.000823 0.003290 0.008779 0.002195
      0.131048 4.558328 0.010397 0.041686 0.078407 0.019558
     0.322133 3.086582 0.012306 0.049352 0.075281 0.018752
     0.470814 2.498730 0.016634 0.066741 0.091215 0.022767
 5
     0.584596 2.176826 0.019534 0.077926 0.100088 0.025108
      0.668511 1.983994 0.020385 0.081564 0.101010 0.025351
 7
      0.733901 1.852752 0.020902 0.083760 0.101467 0.025360
     0.787041 1.756204 0.021426 0.085765 0.102214 0.025504 0.830504 1.683192 0.021639 0.086598 0.101926 0.025416
 9
     0.867463 1.625093 0.022014 0.088080 0.102341 0.025638
10
11
     0.898019 1.579374 0.021885 0.087561 0.101042 0.025284
     0.924295 1.541663 0.021939 0.087768 0.100614 0.025174
12
     0.946987 1.510223 0.021925 0.037707 0.100008 0.025014
13
      0.966666 1.483729 0.021844 0.087383 0.099263 0.024784
14
15
      0.934351 1.460616 0.022004 0.088017 0.099383 0.024886
      0.999779 1.440890 0.021875 0.087505 0.098517 0.024644
16
      1.013292 1.423879 0.021687 0.086752 0.097583 0.024304
17
     1.025937 1.408344 0.021969 0.087877 0.098249 0.024589
18
19
     1.037053 1.394884 0.021799 0.087199 0.097331 0.024324
     1.047178 1.382805 0.021811 0.087243 0.097121 0.024275
```

C1 = 1.0 C2 = 2.0 ALPHA = 0.05 BETA = 0.05

THE RESULTS OF THIS CASE ARE

K A(K) R(K) 1 0.0008 14.9909 2 0.0633 6.6873 3 0.2220 4.3215 5 0.5089 2.8445 6 0.6111 2.5377 7 0.6951 2.3291 8 0.7626 2.1824 9 0.8198 2.0708 10 0.8698 1.9822 11 0.9128 1.9123 12 0.9491 1.3565 13 0.9805 1.8107 14 1.0110 1.7692 15 1.0368 1.7358 16 1.0592 1.7077 17 1.0797 1.6829 18 1.0986 1.6610 19 1.1149 1.66262	PPOB REJ/H1 0.00003 0.00011 0.00031 0.0022 0.0037 0.0044 0.00552 0.00552 0.00557 0.00557 0.00558 0.00558	ASILITY ACC/HI 0.0053 0.0214 0.0419 0.0586 0.0696 0.0787 0.08889 0.0984 0.0997 0.1073 0.1073 0.1075 0.1114 0.1106	OF THE EVE REJ/H2 0.055 0.0263 0.0656 0.0126 0.1126 0.1278 0.1374 0.1337 0.1341 0.1337 0.1361 0.1368 0.1373 0.1368 0.1368 0.1366 0.1362	ACC / H2 0.0030 0.0034 0.0059 0.0063 0.0067 0.0069 0.0069 0.0071 0.0071 0.0072 0.0072 0.0072
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#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 2.0 ALPHA = 0.05 BETA = J.10

THE RESULTS OF THIS CASE ARE

K123456789011234567890	A(K) 0.0388 0.1426 0.51514 0.55174 0.8599 0.9594 1.008899 1.0099 1.12138 1.1635 1.16106 1.21233	R(K) 12.8368 5.7178 3.8160 3.0561 2.0484 2.32397 2.1099 2.0172 1.9466 1.8497 1.77439 1.77439 1.77439 1.66637 1.66492	REJ/H1 0.0011 0.0011 0.0056 0.0064 0.0066 0.0069 0.0069 0.0069 0.0069 0.0070 0.0072 0.0072 0.0072	BABILITY ACC/HI 0.0020 0.0203 0.0582 0.0585 0.1155 0.1255 0.1255 0.1252 0.1302 0.1362 0.1332 0.1362 0.1360 0.1360 0.1360	OF THE EVERED THE EVER EVERED THE EVER EVER EVER EVER EVER EVER EVER EV	ACC/H2 0.J015 0.0105 0.0108 0.0133 0.0144 0.0147 0.0148 0.0147 0.0147 0.0147 0.0147 0.0147 0.0147 0.0147
20	1.4233	1.0492	0.0072	0.1350	0.1302	0.0145

## THIS CASE HAS PARAMETERS AS FOLLOWS

THE RESULTS OF THIS CASE ARE

2 0.1990 3 0.4475 4 0.6305 5 0.7661 6 0.8673 7 0.9459 8 1.0091 9 1.0698 10 1.1032 11 1.1374 12 1.1703 13 1.1970 14 1.2215 15 1.22495 16 1.2585 17 1.22889	1.5053 53.5386	PF1333399 PF133339	ABILITY O ACC/H1 0.0065 0.0462 0.1003 0.1473 0.1590 0.1644 0.1657 0.1667 0.1667 0.1670 0.1672 0.1673	F THE EVEN REJ/H2 0.0188 0.1181 0.1382 0.1388 0.1378 0.1378 0.1374 0.1349 0.1344 0.1349 0.1331 0.1310 0.1310 0.1310 0.1310	TACC / H2 0.001335 0.0012034 0.0012034 0.0022444 0.0022442 0.0022333 0.0022333 0.0022333 0.0022333 0.002333 0.002333 0.002333
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THE RESULTS OF THIS CASE ARE

K1234567891011234567889	A (K) 0.0190 0.2756 0.54856 0.87107 1.1074 1.1989 1.22886 1.3328 1.3373 1.3373	R (K) 10.5052 4.1448 3.75110 2.4830 2.2918 2.1613 1.9384 1.8567 1.8567 1.8567 1.7287	REJ/GC 71 000041 000076 000098 0000102 000102 000104 000104 000104 000104 0001033	ABILITY ACCUMANTA 0.0131 0.0771 0.14519 0.1866 0.1914 0.19669 0.1970 0.1966 0.1966	OF THE EVER REJ/H62 0.0911 0.1336 0.1443 0.1443 0.1442 0.1376 0.1376 0.13362 0.1338 0.1332 0.1318	ACC / H2 0.0228 0.03245 0.03351 0.03553 0.03553 0.03553 0.0344 0.03346 0.03346 0.03333 0.03332
18		1.7287	0.0103	0.1964	0.1318	0.0330
19		1.7158	0.0103	0.1963	0.1315	0.0329
20		1.7044	0.0103	0.1962	0.1311	0.0328

THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 2.0 ALPHA = 0.10 BETA = 0.05

THE RESULTS OF THIS CASE ARE

K A(K) R(K) 1 0.C018 12.835 2 0.C883 3.74C 3 0.2635 3.74C 5 0.5420 2.536 6 0.6375 2.283 7 0.7144 2.108 8 0.7777 1.983 10 0.8740 1.71C 11 0.9114 1.75C 12 0.9443 1.71C 13 0.9724 1.67C 14 0.9995 1.6636 15 1.0424 1.5564 17 1.0597 1.564 18 1.0750 1.564 19 1.C886 1.528	REJ/H1 ACC/H1 4 0.0001 0.0012 7 0.0035 0.0319 7 0.0035 0.0523 5 0.0074 0.0665 6 0.0083 0.0749 0 0.0096 0.0810 7 0.0099 0.08840 7 0.0099 0.0894 2 0.0104 0.0933 0 0.0104 0.0933 0 0.0104 0.0957 8 0.0107 0.09953 4 0.0113 0.1016 6 0.0113 0.1016 7 0.0112 0.1017	## THE EVENT   REJ/H2   ACC/H2   O.0117   O.0006   O.0027   O.00505   O.0027   O.1042   O.0055   O.0027   O.1042   O.0055   O.0027   O.1042   O.0055   O.1059   O.0084   O.10605   O.0084   O.10605   O.0085   O.10605   O.0085   O.10605   O.0085   O.10605   O.0085   O.10605   O.0087   O.10606   O.0087   O.10606   O.0086   O.10607   O.0086   O.0086   O.10607   O.0086   O.0086   O.10607   O.0086   O.10607   O.0086   O.10607   O.0086   O.10607   O.0086   O.10607   O.0086   O.0086   O.0086   O.10607   O.0086   O
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THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 2.0 ALPHA = 0.10 BETA = 0.10

THE RESULTS OF THIS CASE ARE

10     1.0075     1.7713     0.146     0.1317     0.1662     0.01       11     1.0419     1.7238     0.0149     0.1340     0.1655     0.01       12     1.0711     1.6854     0.0149     0.1345     0.1657     0.01       13     1.0962     1.6537     0.0150     0.1349     0.1652     0.01       14     1.1180     1.6277     0.0150     0.1359     0.1647     0.01       15     1.1371     1.6042     0.0150     0.1354     0.1643     0.01       16     1.1539     1.5347     0.0150     0.1354     0.1638     0.01       17     1.688     1.5677     0.0150     0.1354     0.1639     0.01       18     1.1823     1.5527     0.0151     0.1362     0.1641     0.01       19     1.1949     1.5391     0.0153     0.1381     0.1661     0.01       20     1.2059     1.5274     0.0152     0.1374     0.1654     0.01	185 184 184 183 183 182 182 182
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C1 = 1.0 C2 = 2.0  $\Delta LPHA = 0.10$  BETA = 0.15

THE RESULTS OF THIS CASE ARE

K123456789012345679	A(K) 0.0200 0.2712 0.5219 0.6947 0.8178 0.9090 1.00798 1.1476 1.1476 1.1476 1.1476 1.1476 1.1478 1.2166 1.2388 1.2462	9.20018821 43.20018821 43.20018821 1.3005380 1.3005	PCI/H1 0.0015 0.01603 0.0144 0.0148 0.0173 0.0188 0.0188 0.0188 0.0188 0.0188 0.0190 0.0190 0.0190	ACC/H1 0.0137 0.137 0.1296 0.1512 0.1650 0.1653 0.1686 0.1686 0.1689 0.1694 0.1707 0.1707 0.1707	OF THE EVEN DE LA CONTROL OF THE EVEN DE LA	ACC/H2 0.0069 0.0222 0.0302 0.0316 0.0315 0.0339 0.0302 0.0302 0.0301 0.0301 0.0301 0.0302 0.0301 0.0329 0.0329
16 17 18 19 20						

### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 2.0 ALPHA = 0.10 BETA = 0.20

THE PESULTS OF THIS CASE ARE

#### THIS CASE HAS PARAMETERS AS FOLLIWS

C1 = 1.0 C2 = 2.0 ALPHA = 0.15  $36^{+4} = 0.05$ 

THE FESULTS OF THIS CASE ARE

17	18 19	1.0727	1.4626	PEJ/H1 0.0036 0.00703 0.0125 0.0125 0.0137 0.0137 0.0136 0.0151 0.0158 0.0169 0.0174 0.0174 0.0174 0.0174	ACC ZHI 0.0020 0.0145 0.0345 0.0507 0.05707 0.07774 0.0858 0.0906 0.0906 0.0906 0.0937 0.0934 0.0934 0.0934 0.0984 0.0984 0.0984 0.0984 0.0984	0.1366 0.1970	ACC/H2 0.0010 0.0039 0.1071 0.0086 0.1092 0.0094 0.1096 0.1096 0.0096 0.0098 0.0098 0.1098 0.1098 0.1098 0.1098
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K A(K) R(K) 1 0.0126 9.3510 2 0.2138 4.1701 3 0.4390 2.9291 4 0.6000 2.4218 5 0.7178 2.1436 6 0.8053 1.9709 7 0.8735 1.8526 8 0.9276 1.7670 9 0.9715 1.7025 10 1.0079 1.6521 1 1.0385 1.6118 12 1.0643 1.5790 13 1.0865 1.5518 14 1.1056 1.5289 15 1.1223 1.5095 16 1.1370 1.4927 17 1.1505 1.4777 18 1.1627 1.4645 19 1.1739 1.4528 20 1.1837 1.4426	REJ/H1 0.00189 0.00164 0.0164 0.01214 0.02232 0.02232 0.02335 0.02336 0.02336 0.02336 0.02336	BILITY ACC7HI 0.04999 0.04999 0.12279 0.12289 0.12279 0.13334 0.13335 0.13335 0.13335 0.13337 0.13378	OF THE EVEL RF J/H2 0.0391 0.1296 0.1830 0.1954 0.1954 0.1956 0.1956 0.1956 0.1956 0.1956 0.1956 0.1921 0.1921 0.1914 0.1904 0.1	NT ACC/H2 0.0144 0.0144 0.0203 0.0221 0.0221 0.02219 0.0211 0.0215 0.02113 0.0212 0.0212 0.02113 0.0212 0.02113
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# THIS CASE HAS PROJUBLED AS EXPLOSES $C1 = 1.0 \qquad C2 = 1.1 \qquad \text{ALPIA} = 0.15 \qquad \text{BETA} = 0.15$ THE RESULTS OF THIS CASE ARE

K A(K) 1 0.0317 2 0.3250 3 0.5676 4 0.7316 5 0.8459 6 0.9033 8 1.04536 10 1.1125 11 1.1458 11 1.1689 13 1.1872 14 1.2044 15 1.2319 17 1.2430	3.6532 2.66432 2.664577 1.67452 2.67477 1.67452 1.67387 1.65716 1.65716 1.65716 1.65716 1.65716 1.65716 1.65716 1.65716 1.65716	0.63741 0.11262 0.1177 0.1262 0.1268 0.1269 0.1306 0.1306 0.1306 0.1306 0.1306 0.1306 0.1306 0.1306	ACC/+1 0.0217 0.1217 0.1473 0.1473 0.1737 0.1737 0.1738 0.1738 0.1738 0.1737 0.1738 0.1737	2F THE EV ELIMINATION OF THE E	ACC/H2 0.0139 0.0310 0.0373 0.0373 0.03778 0.0372 0.0363 0.0363 0.0363 0.0369 0.0369 0.0357 0.0357 0.0355 0.0355
	1.4793				

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 2.0 ALPHA = 0.15 BETA = 0.20

			PR 08	BABILITY	OF THE EVE	NT
K	A(K)	R (K)	REJ/H1	ACC/H1	REJ/H2	ACC/H2
1	0.0637	7.0366	0.0076	0.0432	0.0873	0.0218
2	0.4451	3.2949	0.0286	0.1618	0.2150	0.0538
3	0.6964	2.5054	0.0357	0.2012	0.2326	0.0577
4	0.8586	2.1615	0.0377	0.2137	0.2316	0.0578
5	0.9694	1.9704	0.0382	0.2169	0.2276	0.0568
6	1.0490	1.8500	0.0333	0.2172	0.2234	0.0559
7	1.1088	1.7675	0.0383	0.2172	0.2204	0.0551
8	1.1552	1.7079	0.0383	0.2171	0.2180	0.0545
9	1.1917	1.6632	0.0382	0.2164	0.2158	0.0539
10	1.2213	1.6286	0.0381	0.2151	0.2142	0.0535
11	1.2456	1.6011	0.0381	0.2158	0.2129	0.0532
12	1.2658	1.5787	0.0380	0.2156	0.2119	0.0530
13	1.2829	1.5603	0.0380	0.2154	0.2110	0.0528
14	1.2974	1.5450	0.0380	0.2153	0.2104	0.0526
15	1.3099	1.5320	0.0380	0.2153	0.2098	0.0524
16	1.3207	1.5210	0.0380	0.2152	0.2093	0.0523
17	1.3301	1.5114	0.0380	0.2153	0.2094	0.0523
18	1.3384	1.5032	0.0380	0.2153	0.2093	0.0523
i 9	1.3459	1.4959	0.0382	0.2157	0.2103	0.0526
2ó	1.3525	1.4895	0.0382	0.2155	0.2107	0.0527

THE RESULTS OF THIS CASE ARE

K1234567890112345678118	A (K) 0.01244 0.3107 0.45733 0.6288 0.72843 0.8682 0.9029 0.97764 1.01558 1.03441	R (K) 7 8 4.6260 3.12330 7 1.985330 5 1.99523 1 1.55399 1 1.4707 7 1.4258 8 1.4258 8 1.4963	REJ/H1 0.0047 0.0047 0.01184 0.0196 0.0213 0.02212 0.02213 0.02239 0.02234 0.0254 0.0254 0.0248	BABILITY ACC/H1 0.00120 0.00455 0.00735 0.007827 0.00822 0.008715 0.008715 0.00917 0.00917 0.00964 0.1018 0.00991	OF THE EVE REJ/H2 0.0263 0.0983 0.1633 0.1873 0.1973 0.2011 0.2014 0.2013 0.2014 0.2015 0.2025 0.2025 0.2045 0.2045 0.2045 0.2045 0.2015 0.2015 0.2015 0.2016 0.201	ACC/H2 0.0014 0.0052 0.0086 0.0099 0.0104 0.0106 0.0106 0.0106 0.0106 0.0106 0.0107 0.0108 0.0109 0.0109 0.0113

# THIS CASE HAS PARAMETERS AS ENTINES

C1 = 1.0 C2 = 2.0 ALPHA = 0.20 PETA = 0.10 THE PESHLTS SE THIS SASE ARE

			רפון	BARTLITY	UE THE EV	r x i m
K	A (K.)	2 (K)	PFJ/H1	111 CON	₹FJ/H2	5CC/H2
1	0.0178	8.3487	0.0031	0.0123	0.0554	0.0062
2	0.2448	3.7395	0.0157	0.0629	1.1673	0.0186
	A.4675	-2 0 354-	~ n- n- ++	A 1099	- 4-9158	7.0240
4	0.6224	2.2327	0.0200	0.1107	0.2248	0.0250
5	0.7340	1.9829	0.1718	0.1272	0.2260	ດຸດວຣາ
6	2.81(3	1.8360	0.1325	0.1300	0.2218	2.0249
7	0.8802	1.7322	0.3321	0.1324	0.2232	0.0243
Я	0.9301	1.6572	0.0332	0.1328	0.2206	0.0245
9	0.9707	1.6002	0.0334	0.1337	0.2197	0.0244
()	1.0040	1.5559	0.0235	0.1341	0.2185	0.0243
	<u>1.0314</u>	1.50A4	1001376 -	17. 1944	- A.2177	0. 9242
. 5	1.0554	1.4917	0.0337	0.1347	0.2170	0.0241
' 3	1.0755	1.4673	0.0337	0.1348	0.2170	0.0241
. 4	1.0927	1.4478	0.1327	0.1347	0.2166	0.0241
. 5	1.1090	1.4298	0.0347	0.1387	1) 2209	0.0245
1.6	1.1229	1.4148	0.0346	0.1304	0.2211	0.0246
. 7	1.1346	1.4023	0.0343	0.1373	0.2202	0.0245
- 9	1.1449	1.3914	0.0342	n. 1368	0.2198	0.0244
<del>-</del>	1.1550	1.3811	" n. 1134.9	0.1467	- 7-45-	0.0249
0	1.1639	1.3723	กิวเริ่	0.1411	1.2248	0.0250
U	1.1639	1.3723	0.0353	0.1411	1.2248	0.0250

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 2.0 ALPHA = 0.20 BETA = 0.15

K 1 2	A(K) 0.0449 0.3701	R(K) 7.0274 3.2382 2.4229	PROE REJ/H1 0.0077 0.0306	ABILITY ( ACC/H1 0.0307 0.1224	OF THE EVI REJ/H2 0.0876 0.2225	ENT ACC/H2 0.0155 0.0393
5 6 7 8 9	0.7605 0.8674 0.9446 1.0031 1.0486 1.0849 1.1144	2.0729 1.8781 1.7559 1.6720 1.6114 1.5657 1.55302	0.0432 0.0442 0.0444 0.0446 0.0446 0.0447 0.0448	0.1729 0.1770 0.1778 0.1785 0.1785 0.1790 0.1791	0.2489 0.2460 0.2420 0.2394 0.2377 0.2357	0.0439 0.0434 0.0427 0.0422 0.0418 0.0416 0.0412
12 13 14 15 16 17 18	1.1590 1.1761 1.1907 1.2032 1.2143 1.2240 1.2324 1.2395 1.2457	1.4793 1.4606 1.4449 1.4317 1.4202 1.4104 1.4020 1.3949 1.3886	0.0448 0.0448 0.0448 0.0451 0.0451 0.0452 0.0452	0.1792 0.1793 0.1794 0.1794 0.1806 0.1807 0.1806 0.1784 0.1782	0.2330 0.2325 0.2328 0.2328 0.2339 0.2340 0.2345 0.2325	0.0411 0.0410 0.0411 0.0411 0.0413 0.0413 0.0414 0.0410

C1 = 1.0 C2 = 2.0 ALPHA = 0.20 BETA = 0.20

# THE RESULTS OF THIS CASE ARE

K 123 45 67 89 10 112 114 116 118	A(K) 0.0902 0.5049 0.7434 0.8939 1.0659 1.1588 1.1588 1.157 1.2363 1.2573 1.2673 1.2673 1.2978 1.3053	R(K) 6.84322.25231.9661 1.8070 1.7078 1.58899 1.558399 1.558247 1.50223 1.49697 1.4576 1.44387 1.4387	PR UI 7 H1 0 · U1 51 0 · U1 52 0 · U5 64 0 · U5 666 0 · U5 666	BABILITY ACC/HI 0.0606 0.1929 0.2188 0.2271 0.2271 0.2271 0.2273 0.2258 0.2258 0.2256	UF THE EVE REJ/H2 0.1731 0.2685 0.2725 0.2637 0.2637 0.2530 0.2555 0.2530 0.2514 0.2471 0.2471 0.2471 0.2446 0.2471 0.2466 0.2471 0.2466	ACC/H2 0.0308 0.0671 0.0679 0.0659 0.0648 0.0639 0.0625 0.0625 0.0623 0.0619 0.0619 0.0618 0.0618 0.0620

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 2.5 ALPHA = 0.05 BETA = 0.05

THE PESULTS OF THIS CASE APE

К	Δ(K)	R(K)	PRCE REJVH1	ACC/H1	OF THE EVE	NT ACC/H2
1 2	0.0069	11.9597	0.0003	0.0048	0.0363	0.0019
3	0.4110	3.6251	0.0045	0.0847	0.1916	0.0101
5	0.7289 0.8321	2.5746	0.0071	0.1342	0.2194 0.2194	0.0115
8	0.9142	2.1928	0.0079	0.1508 0.1536 0.1564	0.2201	0.0116
9 10 11	1.0325 1.0771 1.1148	1.9993 1.9343 1.8825	0.0082 0.0083 0.0084	0.1585	0.2172 0.2163 0.2156	0.0114 0.0114 0.0113
12	1.1469	1.8403	0.0085	0.1607	0.2147	0.0113
14 15	1.2005	1.7749	0.0086	0.1641	0.2147	0.0113
16 17	1.2432	1.7271	0.0089	0.1692	0.2159	0.0114
18 19	1.2786 1.2933	1.6766	0.0092	0.1740	0.2186	0.0115
20	1.3065	1.6641	0.0091	0.1731	0.2183	0.0115

# THIS CASE HAS PARAMETERS AS FOLLOWS

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	14 15 16 17 18	0.51908 0.578191 1.028191 1.0285 1.26099 1.22854 1.33804 1.33804 1.34277 1.34244	1.8109 1.7905 1.7730 1.7578 1.7445 1.7329	REJ/H1 C.CC50 O.CC56 O.CC586 C.D1009 O.D1114 O.D1115 O.D1116 O.D1116 O.D1116 O.D1116 O.D1116 O.D1116 O.D1116 O.D1116	ACC/H1 C.0165 O.01943 O.1642 O.2063 O.2117 O.2158 O.2158 O.2158 O.2158 O.2159 O.2199 O.2206 O.2206 O.2206 O.2206 O.2206	0.2107 0.2098 0.2090 0.2083 0.2077	NT ACC / H2 0.0046 0.0192 0.0254 0.0254 0.0254 0.0254 0.0248 0.0248 0.0249 0.0233 0.0233 0.0231 0.0231
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C1 = 1.0 C2 = 2.5 ALPHA = 0.05 BETA = 0.15

#### THE RESULTS OF THIS CASE ARE

K 123456789 10112134 1567189	A (K5185) 0 · C44348 0 · C44348 1 · O7738 1 · O7738 1 · O7732 1 ·	R ( K735523 9 • 149565 3 • 149565 4 • 15965 2 • 41576 2 • 14715 2 • 14715 1 • 997765 1 • 88324 1 • 884004 1 • 884004	REJUGENE AND	BABILITY ACC/H1 0.13530 0.125991 0.26667 0.26667 0.27703 0.27703 0.27704 0.27704 0.27704 0.27703	REJ/142 0.0808 0.2076 0.2336 0.2336 0.2333 0.2285 0.2249 0.2174 0.2175 0.2175 0.2145 0.2145 0.2145 0.2145 0.2145 0.2145 0.2145 0.2145 0.2146 0.2136	ACC/H2 0:0143 0:0366 0:0409 0:0413 0:05403 0:0397 0:0387 0:0387 0:0373 0:0373 0:0373 0:0373
18 19 20	1.5485 1.5587 1.5678	1.8002 1.7904 1.7817	0.0142	0.2703	0.2096	0.0370

#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 2.5 ALPHA = 0.05 BETA = 0.20

# THE RESULTS OF THIS CASE ARE

K A(K) R(K) 1 0.0926 8.2559 2 0.5843 3.9224 3 0.8843 3.0371 4 1.C876 2.3991 6 1.3163 2.2600 7 1.3877 2.1649 8 1.4427 2.09661 10 1.5219 2.0052 11 1.55756 1.9477 13 1.5756 1.9477 13 1.5756 1.9477 13 1.5756 1.9487 14 1.6637 1.8940 15 1.66291 1.88940 16 1.66291 1.88940 17 1.6637 1.88097 18 1.6637 1.88097 19 1.66805 1.8454	REJOHANNA CONTROL OF C	BABILL/H22 0.0239148 0.0239148 0.33122109 0.3312996 0.3311993 0.3311993 0.3311993 0.3311993 0.3311997 0.3311997	OF THE EVE RE1/1014 0 • 12342 0 • 124448 0 • 12369 0 • 1259 0 • 1259	ACC/H2 0.0253 0.0586 0.0595 0.0592 0.0567 0.0558 0.0546 0.0539 0.0539 0.0539 0.0528 0.0528 0.0528
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# THIS CASE HAS PARAMETERS AS FOLLOWS

# 

THE RESULTS OF THIS CASE ARE

K 12 3 4 5 6 7 8 9 11 12 3 14 5 16 17 18 19 11 12 11 11 11 11 11 11 11 11 11 11 11	A(K) 0.0394 0.3744 0.6396 0.8168 0.9408 1.0308 1.1935 1.1534 1.2611 1.2857 1.3248 1.3406 1.3544 1.3664 1.3769 1.3861	R(K) 8.3823 2.83323 2.83323 2.16928 1.92224 1.93453 1.7531 1.7195 1.65907 1.663411 1.69943 1.59963 1.59963 1.59828	PROJUBLE PROJ	BABILITY 10.0270 0.1255 0.1810 0.2015 0.2015 0.2137 0.2137 0.2158 0.2158 0.2159 0.2159 0.2176 0.2176 0.2181 0.2176 0.2181 0.2179	PE THE EV PE J/H2 O . 0979 0 . 2450 0 . 2789 0 . 2630 0 . 2612 0 . 2588 0 .	ACC / H2 0.0109 0.0272 0.0309 0.0311 0.0307 0.0298 0.0295 0.0295 0.0296 0.0287 0.0288 0.0287 0.0288 0.0287

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 2.5 ALPHA = 0.10 BETA = 0.15

THE PESULTS IF THIS CASE ARE

1 0.0853 7.2331 2 0.5326 3.4554 4 0.9848 2.3114 5 1.1043 2.1169 6 1.1894 1.9953 7 1.2528 1.9125 8 1.3019 1.8528 9 1.3406 1.8080 10 1.3719 1.7734 11 1.3976 1.7460 12 1.4170 1.7239 13 1.4370 1.7239 14 1.4522 1.6782 15 1.4652 1.6782 16 1.4764 1.6584 17 1.4861 1.6584 18 1.9946 1.6636	PRCBA R J J H 1 - 0 0 6 4 - 0 0 6 3 - 0 0 2 3 9 - 0 0 3 0 2 - 0 3 0 0 3 - 0 3 0 4 - 0 3 0 0 4	ABILITY OF ACCIPITY OF ACCIPIT	THE EVEN 1/142 00.13279 10.13279 10.2287919 10.228700 10.227250 10.2268710 10.226871 10.226372 10.226332 10.22625	ACC / H2 0.0234 0.0508 0.0516 0.0516 0.05505 0.0494 0.0481 0.0477 0.0477 0.0477 0.0477 0.0469 0.0466 0.0466 0.0466 0.0466 0.0464 0.0464 0.0464 0.0464
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# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 2.5 ALPHA = 0.10 BETA = 0.20

1 0.1524 6.4886 2 0.6965 3.2035 3 0.9713 2.5607 4 1.1460 2.2607 5 1.2594 1.9942 7 1.33968 1.9245 8 1.4409 1.8747 9 1.4751 1.8376 10 1.5024 1.8376 11 1.5245 1.7868 12 1.5426 1.7689 13 1.5576 1.7524 14 1.5702 1.7424 15 1.5809 1.7324 16 1.5900 1.7240 17 1.5978 1.7168 18 1.6046 1.7105	PRIBA REJ/H1 0.01111 0.0330 0.0352 0.0368 0.03667 0.03664 0.0364 0.0364 0.0364 0.0364 0.0365 0.0365 0.03665	ABILITY OF ACCIPACT OF ACCIPAC	F THE EVEN REJ/H25 00.31069 00.31069 00.32947 00.22947 00.22756 00.22756 00.22713 00.22713 00.22713 00.22701 00.22699 00.26994	ACC / H2 0.0414 0.0799 0.0757 0.0757 0.0719 0.0709 0.0689 0.0689 0.0687 0.0677 0.0677 0.0677
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C1 = 1.0 C2 = 2.5 ALPHA = 0.15 3FTA = 0.05

THE RESULTS OF THIS CASE ARE

k 123 45 67 89 0 1 1 2 3 4 5 6 7 8 9 1 1 1 2 3 1 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A (K) 0.0155 0.2376 0.46777 0.6314 0.6314 0.9015 0.8388 0.9016 1.004 1.004 1.004 1.104 1.1219 1.1426 1.1756	P (KS) 20036646520.0336465545220.036646551.0945251.0945251.0945246611.0946611.0946611.0946811.	REJ/H1 0.0106 0.0106 0.01321 0.02239 0.022472 0.02555 0.02553 0.02653 0.02663 0.02673 0.02673 0.1276	ACC/H1 0.01999 0.10462 0.12555 0.1399 0.14447 0.14489 0.1509 0.1499 0.15489 0.15489 0.15489 0.15489	UF THE EVE PFJ/H2 0.0812 0.2812 0.29147 0.2930 0.2889 0.2860 0.2860 0.2847 0.2847 0.2847 0.2847 0.28847 0.2883 0.2999	ACC/H2 0.0043 0.0118 0.0154 0.0154 0.0153 0.0150 0.0150 0.0150 0.0150 0.0150 0.0152 0.0152
15	1.1601	1.5046	0.0273	0.1549	0.2883	0.0152

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 2.5 ALPHA = 0.15 8ETA = 0.10

THE RESULTS OF THIS CASE ARE

			PR O	BABILITY	OF THE EVE	NT
K	A(K)	R(K)	REJ/H1	ACC/H1	REJ/H2	ACC/H2
1	0.0537	7.2775	0.0064	0.0365	0.1333	0.0148
2	0.4162	3.3680	0.0259	0.1468	0.3001	0.0333
3	0.6691	2.5380	0.0336	0.1906	0.3199	0.0355
4	0.8347	2.1771	0.0363	0.2059	0.3186	0.0354
5	0.9486	1.9779	0.0371	0.2137	0.3132	0.0348
6	1.0307	1.8532	0.0374	0.2121	0.3077	0.0342
7	1.0925	1.7682	0.0375	0.2129	0.3038	0.0338
8	1.1403	1.7070	0.0376	0.2131	0.3007	0.0334
	1.1785	1.6610	0.0377	0.2136	0.2988	0.0332
10	1.2093	1.6255	0.0377	0.2137	0.2971	0.0330
11	1.2351	1.5971	0.0380	0.2152	0.2971	0.0330
11	1.2566	1.5742	0.0380	0.2155	0.2964	0.0329
13	1.2746	1.5556	0.0380	0.2156	0.2966	0.0330
14	1.2898	1.5401	0.0380	0.2153	0.2959	0.0329
15	1.3027	1.5273	0.0378	0.2143	0.2959	0.0329
16	1.3138	1.5163	0.0379	0.2145	0.2964	Q.0329
17	1.3235	1.5068	0.0378	0.2141	0.2961	0.0329
18 19	1.3319	1.4987	0.0377	0.2137	0.2959	0.0329
19	1.3396	1.4913	0.0381	0.2158	0.2981	0.0331
20	1.3470	1.4847	0.0388	0.2201	0.30 <b>5</b> 5	0.0339

# THIS CASE HAS PARAMETERS AS FULLOWS

C1 = 1.0 C2 = 2.5 ALPHA = 0.15 BETA = 0.15

K A(K) R(K) 1 0.1161 6.1959 2 0.5897 3.0034 4 1.0081 2.0776 5 1.1149 1.9186 6 1.1900 1.8192 7 1.2451 1.7513 8 1.2869 1.7037 9 1.3194 1.6678 10 1.3453 1.6403 11 1.3663 1.6187 12 1.3838 1.60403 11 1.3983 1.5871 12 1.3983 1.5871 14 1.4105 1.5755 15 1.4207 1.5659 16 1.4234 1.55659 17 1.4369 1.55451 18 1.4487 1.55451 19 1.4487 1.55451	PROBJERS PROBLEM PROBL	ABILITY ACCOPTAGE 0.23-616-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-	OF THE EVE PEJ/H2 0.3482 0.34411 0.33280 0.33280 0.33143 0.31143 0.31143 0.3100 0.3093 0.3093 0.3093 0.3094 0.3089 0.3089 0.3089 0.3089	H17510399 00.0055555444455 00.00555555444455 00.005555554544455 00.005555554544455 00.005555555555
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4 1.1753 2.0235 0.0 5 1.2731 1.8947 0.0 6 1.3403 1.8145 0.0 7 1.3882 1.7608 0.0 8 1.4239 1.7228 0.0 9 1.4511 1.6948 0.0 11 1.4725 1.6736 0.0 11 1.4894 1.6573 0.0 12 1.5030 1.6444 0.0 13 1.5141 1.6341 0.0 14 1.5230 1.6259 0.0 15 1.5305 1.6191 0.0 16 1.5367 1.6134 0.0 17 1.5420 1.6087 0.0 18 1.5465 1.6047 0.0 19 1.5504 1.6014 0.0	1594 0.3340 605 0.3419 6602 0.3419 6600 0.3391 1597 0.3391 1597 0.3395 1599 0.3398 1599 0.3398 1599 0.3398 1599 0.3398 1599 0.3398 1599 0.3391 1599 0	0.3570 0.3502 0.3416 0.33516 0.33288 0.32257 0.3246 0.3225 0.32221 0.32221 0.32221 0.3221	0.0892 0.0854 0.0854 0.0849 0.0822 0.0817 0.0811 0.0811 0.0811 0.0807 0.0807 0.0805 0.0805
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K A(K) R(K) 1 0.0195 8.2197 2 0.2576 3.6750 3 0.4823 2.6433 4 0.6396 2.2083 5 0.7525 1.9693 6 0.8367 1.8195 8 0.9517 1.6443 9 0.9928 1.5890 10 1.0263 1.58463 11 1.0775 1.4848 13 1.0984 1.4614 1.1173 1.4411 15 1.1348 1.4233 16 1.1486 1.4203 16 1.1486 1.4233 16 1.1598 1.3889 19 1.1777 1.3807 20 1.1849	PROBABILITY REJ/H1	OF THE EVENT REJ/H2 ACC/H2 0.1024 0.0054 0.2640 0.0139 0.3135 0.0165 0.3208 0.0169 0.3277 0.0165 0.3137 0.0165 0.3137 0.0165 0.3137 0.0165 0.3137 0.0165 0.3137 0.0165 0.3137 0.0163 0.3103 0.0163 0.3103 0.0163 0.3103 0.0163 0.3103 0.0163 0.3103 0.0163 0.3277 0.0172 0.3268 0.0172 0.3268 0.0172 0.3268 0.0172 0.3268 0.0171 0.3360 0.0171
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# THIS CASE HTZ DISTABLESS VC ELITORS

(1 = 1.0	(2 = 2.5	VI DHY - 0.50	RETA =	9.10
	THE DESILET	S OF THIS DASE	4 C C	

K 12 4 5 6 7 8 9 1 1 1 2 3 4 5 6 7	A (K) 0.0494 0.4494 0.8449 1.0247 1.1265 1.1265 1.2411 1.2655 1.27838	R (44022 1.827787 1.87787 1.652787 1.552787 1.552787 1.552787 1.552787 1.47797 1.47998 1.47998 1.47998 1.47998	FFJ/H158 0.014692000000000000000000000000000000000000	ACC / HI 0.1459 0.1639 0.1090 0.21132 0.21337 0.21337 0.2133 0.2134 0.21437 0.21437 0.21437 0.21437 0.21437	FTHE EVENT OF THE	ACC/H2 0.0186 0.0386 0.0387 0.0384 0.0374 0.0376 0.0367 0.0367 0.0367 0.0367 0.0377
6	1.2755	1.4298	0.0546			

# THE RESULTS OF THIS CASE ARE

2 0.6333 3 0.8730 4 1.0205 5 1.1162 6 1.1825 7 1.2305 8 1.2665 9 1.2962 10 1.3158 11 1.3330 12 1.3458 13 1.3563 14 1.3676 15 1.3876 16 1.3819 17 1.3874 18 1.3963	5.3733 .6454 .6454 .645935 .76778 158534 1553143 1550143 1550143 15999 1488139 14627 145847	REJ/H1 0.0241 0.0653 0.0653 0.0687 0.07054 0.07054 0.0702 0.0702 0.0703 0.0703 0.0703 0.0703 0.0703 0.0703	BILITY OF ACC/H1 0.0965 0.2610 0.2753 0.28237 0.2811 0.2810 0.2811 0.2811 0.2811 0.2811 0.2812 0.2812 0.2812 0.2812 0.2812 0.2812 0.2812 0.2812 0.2812 0.2812 0.2833 0.2829	THE EVEN 0.23946 0.33915 0.33915 0.336176 0.33513 0.33513 0.335117 0.335117 0.335117 0.335117 0.335117 0.335117 0.335117 0.335117 0.335117 0.335117	ACC/H2 0.0398 0.0705 0.06627 0.06627 0.06637 0.0627 0.0624 0.0621 0.0621 0.0621 0.0620 0.0620 0.0620 0.0620 0.0620 0.0620

# THIS CASE HAS PARAMETERS AS FOLLOWS

THE RESULTS OF THIS CASE ARE

K A(K) R(K) 1 0.2617 4.5915 2 0.8249 2.0239 4 1.1894 1.83558 5 1.2732 1.73332 6 1.3292 1.6701 7 1.3634 1.6285 8 1.3968 1.59786 10 1.4340 1.5631 11 1.4464 1.5513 12 1.4562 1.5223 13 1.4639 1.53251 14 1.4702 1.52249 16 1.4794 1.52213 17 1.4827 1.5163 17 1.4897 1.5163	PROBABILITY REJ/HI ACC/H1 0.0415 0.1659 0.0872 0.3568 0.0876 0.3511 0.08877 0.3511 0.0877 0.3511 0.0874 0.3499 0.0873 0.3494 0.0873 0.3494 0.0875 0.3501 0.0876 0.3504 0.0877 0.3508 0.0878 0.3511 0.0878 0.3515 0.0878 0.3515 0.0878 0.3515 0.0878 0.3515 0.0878 0.3515 0.0878 0.3515 0.0878 0.3513 0.0878 0.3513 0.0878 0.3513 0.0878 0.3513 0.0878 0.3513 0.0878 0.3513 0.0878 0.3513 0.0878 0.3513 0.0878 0.3513 0.0878 0.3513 0.0878 0.3513	OF THE EVENT REJ/H2 ACC/H2 3.2800 0.0700 0.4363 0.1091 0.4025 0.1006 0.3945 0.986 0.3863 0.0966 0.3786 0.0954 0.3768 0.0942 0.37756 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937 0.37751 0.0937
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# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.0 ALPHA = 0.05 8ETA = 0.05

K A(K) R(K) 1 0.0208 10.3766 2 0.2946 4.6633 3 0.5696 3.3200 4 0.7619 2.7674 5 0.9010 2.4650 6 1.0040 2.2778 8 1.1472 2.0585 9 1.1987 1.9859 11 1.2472 1.9359 12 1.33990 1.8577 12 1.3356 1.8291 14 1.3583 1.8054 15 1.3780 1.7678 15 1.3780 1.7678 17 1.4120 1.7526 18 1.4262 1.7396 19 1.4386 1.7283	0.0045	OF THE EVENT REJ/H2 ACC/H2 0.0909 J.0048 0.2398 0.0126 0.3032 0.0150 0.3032 0.0157 0.2943 0.0155 0.2976 0.0155 0.2871 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0151 0.2857 0.0155
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C1 = 1.0 C2 = 3.0 ALPHA = 0.05 BETA = 0.10

# THE RESLLTS OF THIS CASE ARE

K	PROBABILIT REJ/H1 0.0101 0.191 0.0101 0.282 0.0137 0.282 0.0153 0.282 0.0155 0.295 0.0156 0.295 0.0156 0.296 0.0156 0.297 0.0156 0.297 0.0157 0.298 0.0158 0.300 0.0158 0.300 0.0158 0.300	1 REJ/H2 ACC/H2 0 0.1315 0.0146 0 0.2949 0.0328 6 0.3171 0.0352 9 0.3365 0.0344 5 0.2999 0.0333 0 0.2991 0.0323 9 0.2991 0.0323 9 0.2911 0.0323 5 0.2882 0.0320 0 0.2811 0.0317 3 0.2838 0.0315 6 0.2823 0.0316 0 0.2821 0.0315 7 0.2797 0.0311 5 0.2793 0.0310 0 0.2795 0.0311 5 0.2792 0.0310
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# THIS CASE HAS PARAMETERS AS FULLOWS

C1 = 1.0 C2 = 3.0 ALPHA = 0.05 BETA = 0.15

THE RESULTS OF THIS CASE ARE

K 1 2 3 4 5 6 7 8 9 0 1 1 2 3 4 5 6 7 8 9 1 1 1 2 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A (K) 0.1275 0.6849 0.9960 1.1987 1.3321 1.4265 1.55027 1.55027 1.6548 1.66748 1.6775 1.774038 1.77508 1.7600	R(K) 7.8113 3.71749 2.576560 2.526632 2.26632 2.07500 2.0125 2.00420 2.0125 2.00420 2.0125 2.	REJ/H15 0.01455 0.011787 0.01191 0.01191 0.01191 0.01191 0.01191 0.01191 0.01192 0.01192 0.01192 0.01192	ACC/H1 0.0846 C.2443 0.3403 0.3626 0.3633 0.3633 0.3629 0.3633 0.3633 0.3641 0.3646 0.3647 0.3647 0.3647	DF THE EVI REJ/H2 0.1645 0.3274 0.3195 0.3089 0.3089 0.2662 0.2921 0.2849 0.2849 0.2849 0.2849 0.2849 0.2849 0.2849 0.2746 0.2778	AC C / H2 0 · C / S / S / S / S / S / S / S / S / S /
20	1.7750	1.9088	0.0192	0.3645	0.2773	0.049

# THIS CASE HAS PARAMETERS AS FOLLOWS

			PRO	BABILITY	OF THE EV	ENT
K	A(K)	R(K)	REJ/H1	ACC/H1	REJ/H2	ACC/H2
1	0.2150	7.1002	0.0073	0.1385	0.1939	0.0485
2	0.8786	3.5810	0.0207	0.3925	0.3492	0.0873
3	1.1891	2.9176	0.0208	0.4132	0.3223	0.0806
4	1.3889	2.5932	0.0222	0.4316	0.3207	0.0802
5	1.5172	2.4169	0.0224	0.4295	0.3106	0.0776
6	1.6061	2.3074	0.0224	0.4272	0.3034	0.0758
7	1.6709	2.2334	0.0223	0.4258	0.2981	0.0745
8	1.7199	2.1807	0.0223	0.4248	0.2941	0.0735
. 9	1.7579	2.1416	0.0223	0.4243	0.2911	0.0728
10	1.7881	2.1117	0.0223	0.4242	0.2888	0.0722
11	1.8125	2.0883	0.0223	0.4243	0.2870	0.0717
12	1.8324	2-0697	0.0223	0.4245	0.2855	0.0714
13	1.8490	2.0545	0.0224	0.4247	0.2843	0.0711
14	1.8629	2.0421	0.0224	0.4250	0.2832	0.0708
15	1.8746	2.0318	0.0224	0.4254	0.2823	0.0706
16	1.8846	2.0232	0.0224	0.4257	0.2816	0.0704
17 18	1.8931	2.0159	0.0224	0.4260	0.2809 0.2802	0.0702
10	1.9006	2.0097		0.4265	0.2795	0.0699
19 20	1.9070 1.9126	2.0044 1.9999	0.0224	0.4266	0.2787	0.0697
20	1.9120	107777	0.0223	0.4200	0.2101	0.0097

C1 = 1.0 C2 = 3.0 ALPHA = 0.10 8ETA = 0.05

# THE RESULTS OF THIS CASE ARE

# . THIS CASE HAS PARAMETERS AS FOLLOWS

THE RESULTS OF THIS CASE ARE

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.0 AUPHA = 0.10 BETA = 0.15

# THE PESULTS OF THIS CASE ARE

K123456789901123456789	A (K) 0.3126 0.98578 1.2578 1.52244 1.5936 1.66781 1.77257 1.7419 1.77541 1.77864 1.7864 1.7982	R (K) 5.53390 2.43302 2.43302 2.10316 1.94195 1.91905 1.91905 1.88517 1.88517 1.88432 1.88432	PPPC REJ/H10.00485 0.00485 0.004882 0.004881 0.004880 0.004880 0.004881 0.004881 0.004882 0.004882 0.004883 0.004883 0.004883	8 A BILLITHI 0.19484 0.493877 0.493877 0.493877 0.493877 0.493877 0.4938333 0.49383337 0.4938337 0.4938337 0.49387 0.49387 0	OF THE EVE KEJ/H2 0.2787 0.4324 0.3856 0.3759 0.3759 0.3628 0.3628 0.3628 0.3580 0.35566 0.35556 0.35556 0.35552 0.35538 0.3400	ACC/H2 0.0697 0.1081 0.0982 0.0964 0.0992 0.0914 0.0907 0.0902 0.0895 0.0895 0.0889 0.0889 0.0889 0.0889
20	1.8007	1.8382	0.0424	0.4296	0.3400	0.0850

# THIS CASE HAS PARAMETERS AS FULLIUMS

C1 = 1.0 C2 = 3.0 ALPHA = 0.15 BETA = 0.05

# THE PESULTS OF THIS CASE ARE

K A(K) R(K) 1 0.0380 7.7671 2 0.3594 3.5342 3 0.6090 2.6161 4 0.7772 2.2212 5 0.8947 2.0043 6 0.9808 1.3686 7 1.0460 1.7766 8 1.0967 1.7106 9 1.1376 1.6228 1.1188 1.5920 1.2228 1.5670 1.2424 1.55472 1.2228 1.5670 1.2424 1.5164 1.2286 1.5920 1.3149 1.4790 1.3149 1.4790 1.3149 1.4741	PP( EEJ/H46 0.02071 0.03297 0.03344 0.03447 0.03447 0.03558 0.03563 0.03563 0.03567 0.03567 0.03559 0.03559 0.03559	BABILITY ACC/H1 0.0260 0.1176 0.11649 0.1833 0.19149 0.1968 0.1973 0.2000 0.20055 0.2078 0.2078 0.2078 0.2078 0.2078 0.201882	OF THE EVE	ACC/H2 0.0087 0.0190 0.0204 0.0204 0.0199 0.0197 0.0195 0.0197 0.0198 0.0200 0.0197 0.0198 0.0200 0.0197 0.0198 0.0200 0.0198 0.0201 0.0214 0.0208
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# THIS CASE HAS PARAMETERS AS FOLLOWS

2345678901123456789	A (K) 00.5950 1.01290 1.01290 1.206028 1.33517 1.38304 1.41665 1.4462 1.44518 1.4518 1.4518	R(8) 62.935701 1.992651 1.81444 1.7066096 1.661931 1.664096 1.557026 1.556568 1.556568	REJ/H1 0.01378 0.0478 0.0478 0.0505 0.0505 0.0505 0.0505 0.0505 0.0507 0.0507 0.0508 0.0508 0.0508 0.0508 0.0508 0.0508 0.0508	ACC/H1 0.0777 0.2428 0.2716 0.2832 0.2849 0.2860 0.2860 0.2860 0.2864 0.2883 0.2883 0.2883 0.2883 0.2883 0.2883 0.2883 0.2883 0.2883 0.2883	OF THE EVE REJ/H2 0.2393 0.4290 0.4166 0.4098 0.4007 0.3852 0.3854 0.3854 0.3854 0.3852 0.3852 0.3859 0.3903 0.3903 0.3903	ACC / H2 0.04677 0.04555 0.04455 0.04439 0.04328 0.04227 0.04228 0.04227 0.04229 0.0433
20	1.4675	1.5424	0.0500	0.2838	0.3896	0.0433

# C1 = 1.0 C2 = 3.0 ALPHA = 0.15 BETA = 0.15 THE PESULTS OF THIS CASE ARE

7 1.4350 1.7654 J.1543 1.4703 1.4703 1.7304 0.5643 0.9 1.4961 1.7050 J.5643 0.1515 1.5315 1.6725 J.0644 0.12 1.5315 1.6725 J.0644 0.12 1.5539 1.6612 J.0645 J.13 1.5539 1.6523 J.7645 J.15 1.5628 1.5354 J.7645 J.76	.3648	717 713 710 708 707 705 704 703 706 705 704 705 704 706 706 707
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#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.0 ALPHA = 0.15 BETA = 0.20

THE RESULTS OF THIS CASE ARE

#### PROBABILITY OF THE EVENT R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 A(10)0.394235 4.566772 0.042195 0.239107 0.348141 0.087062 1.045425 2.541893 0.161503 0.915678 0.981013 0.244310 1.287371 2.166695 0.077889 0.443173 0.447328 0.111473 3 1.423886 1.994606 0.078312 0.444469 0.437875 0.109049 5 1.507020 1.901699 0.078127 0.442866 0.429789 0.107341 1.561097 1.845693 0.077926 0.441640 0.424289 0.106100 1.597817 1.809463 0.077704 0.440352 0.420380 0.104832 6 7 8 1.624174 1.784557 0.077919 0.441482 0.418394 0.104779 1.643285 1.767013 0.077900 0.441439 0.416464 0.104188 1.657411 1.754293 0.077856 0.441162 0.414979 0.103456 9 10 11 1.668246 1.744775 0.078099 0.442552 0.414369 0.103655 12 1.676613 1.737572 0.078277 0.443563 0.413790 0.103730 13 1.683119 1.732058 0.078390 0.444204 0.413257 0.103641 1.688215 1.727789 0.078444 0.444514 0.412756 0.103394 14 1.692232 1.724449 0.078449 0.444537 0.412272 0.103005 15 16 1.695468 1.721793 0.078612 0.445465 0.412152 0.103179 1.698044 1.719686 0.078552 0.445125 0.411681 0.102644 17 18 1.700173 1.717976 0.078859 0.446863 0.411914 0.103380 1.701879 1.716607 0.078763 0.446321 0.411476 0.102791 1.703274 1.715494 0.078817 0.446630 0.411345 0.102724 19 2.0

K 123 45 67 89 90 112 114 117 117 117 119	A (K) 0.453 0.3779 0.6171 0.7766 0.8866 0.98671 1.0277 1.1406 1.1406 1.1657 1.1864 1.22193 1.22574 1.22574	R (K1708 021068 021068 0240649 11.66994 11.6699522 11.669952 11.649953 11.44105 11.44105 11.44000	REJ/H1 0.00717 0.00316 0.0041659 0.004783 0.004886 0.004886 0.004994 0.004994 0.004999 0.004999 0.004999 0.00494 0.004	ACC/HI 0.0309 0.1267 0.1664 0.1822 0.1913 0.1933 0.1931 0.1944 0.1945 0.1977 0.1983 0.2011 0.1961 0.1976 0.1977	OF THE EVE REJ/H2 0.1979 0.4919 0.4194 0.4116 0.4089 0.4089 0.4089 0.4089 0.4089 0.4089 0.4089 0.4081 0.	ACC/H2 0.0104 0.0212 0.0221 0.0221 0.02217 0.0215 0.0212 0.0213 0.0212 0.0215 0.0216 0.0217 0.0217 0.0217 0.0217 0.0217 0.0217 0.0217 0.0217 0.0217 0.0217 0.0217 0.0217 0.0217 0.0227
20	1.2776	1.3880	0.0655	0.2622	0.5249	0.0276

C1 = 1.0 C2 = 3.0 ALPHA = 0.20 BETA = 0.10

THE RESULTS OF THIS CASE ARE

			ppcb	ABILITY	DE THE EVE	NT
K	A(K)	R(K)	PEJ/H1	ACC/H1	FEJ/H2 -	ACC/H2
1	0.1388	5.4461	0.0229	0.0918	0.2841	0.0315
2	0.6230	2.6789	0.0640	0.2562	0.4747	0.0527
3	0.8664	2.1383	0.000	0.2740	0.4535	0.0304
4	1.0167	1.8930	0.0706	0.2827	0.4461	0.0496
7	1.1144	1.7588	0.0708	0.2832	0.4371	0.0486
2	1.1821		0.0709	0.2835	0.4319	
7		1.6754				0.0480
,	1 • 2311	1.6197	0.0709	0.2835	0.4283	0.0476
8 -	1 - 2677	1.5803	0.0710	0.2840	1.4266	0.0474
Q	1.2957	1.5514	0.0711	0.2843	0.4252	0.0472
10	1.3174	1.5297	0.0709	0.2837	0.4239	0.0471
11	1.3345	1.5130	0.0708	0.2831	0.4224	0.0469
12	1.3483 .	1.4998	0.0708	0.2832	0.4217	0.0469
1.3	1.3600	1.4889	0.0715	0.2862	0.4279	0.0475
4	1.3696	1.4802	0.0715	0.2861	0.4285	0.0476
' 5	1.3774	1.4731	0.0713	0.2853	0.4279	0.0475
1-6-	1.3837	1.4674	0.0706	0.2826	0.4276	0.0475
1 7	1.3888	1.4626	0.0698	0.2793	0.4245	0.0472
1 8	1.3939	1.4581	0.6721	0.2886	0.4381	0.0487
- 9	1.3982	1.4545	2.0719	D.2882	0.4380	0.0487
- Ó	1.4017	1.4515	0.0714	0.2871	0.4367	0.0485

#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.0 ALPHA = 0.20 BETA = 0.15

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT A(K) REJ/Hl ACC/H1 K R(K) REJ/H2 ACC/H2 0.279053 4.507350 0.043970 0.175868 0.352953 0.062440 2 0.852323 2.405968 0.184783 0.740390 1.027125 0.180729 1.084710 2.008249 0.091267 0.365561 0.476025 0.083624 3 4 1.219040 1.827335 0.092072 0.369016 0.466701 0.082105 5 1.301693 1.729512 0.091829 0.367444 0.458269 0.080504 6 1.356793 1.669697 0.091907 0.367673 0.453200 0.079938 7 1.394976 1.630612 0.091889 0.367573 0.449419 0.079380 8 1.421995 1.603933 0.091550 0.366209 0.446125 0.078282 1.442154 1.584694 0.091809 0.367226 0.444717 0.078178 9 10 1.457365 1.570548 0.091924 0.367694 0.443373 0.077910 11 1.469249 1.559814 0.092445 0.369783 0.443060 0.078415 12 1.478324 1.551717 0.092270 0.369081 0.441703 0.077703 13 1.485541 1.545393 0.092552 0.370212 0.441422 0.077820 14 1.491309 1.540417 0.092773 0.371096 0.441118 0.077882 15 1.495943 1.536471 0.092930 0.371725 0.440808 0.077857 1.499686 1.533316 0.093022 0.372093 0.440486 0.077731 1.502725 1.530774 0.093064 0.372259 0.440158 0.077524 16 17 1.505203 1.528711 0.093049 0.372199 0.439798 0.077223 18 1.507308 1.526994 0.093608 0.374438 0.440403 0.078100 19 20 1.509028 1.525597 0.093564 0.374259 0.440048 0.077819

C1 = 1.0 C2 = 3.0 ALPHA = 0.20 BETA = 0.20

#### THE RESULTS OF THIS CASE ARE

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PROBABILITY OF THE LVENT
                  k(K)
                             REJ/1.1 ACC/hl PEJ/h2 ACC/h2
      0.469238 3.848639 0.069414 0.277654 0.410974 0.102747
      1.087990 2.236978 0.236123 0.945411 1.078508 0.268771
       1.299680 1.940600 0.112695 0.451977 0.494889 0.123448
1.412819 1.808582 0.112617 0.451509 0.485488 0.121281
 5
      1.478605 1.738967 0.112465 0.449909 0.478955 0.119789
       1.519571 1.698237 0.112300 0.449217 0.474721 0.118843
1.546246 1.672734 0.112150 0.448607 0.471909 0.117875
 6
 7
      1.564365 1.655905 0.112214 0.448851 0.470275 0.117362
      1.577195 1.644336 0.112674 0.450696 0.469715 0.117844 1.586165 1.636324 0.112420 0.449681 0.468370 0.116647
 9
10
      1.592769 1.630541 0.112812 0.451252 0.468259 0.117060
11
12
      1.597610 1.626345 0.112875 0.451501 0.467778 0.116722
      1.601273 1.623227 0.113318 0.453272 0.467959 0.117407 1.603991 1.620921 0.113217 0.452870 0.467441 0.116744
13
14
15
      1.606074 1.619176 0.113505 0.454020 0.467543 0.117131
16
       1.607656 1.617856 0.113510 0.454046 0.467300 0.116821
       1.608881 1.616844 0.113719 0.454879 0.467368 0.117084
17
18
      1.609822 1.616068 0.113696 0.454781 0.467157 0.116753
19
       1.610553 1.615467 0.113748 0.454989 0.467063 0.116657
20
       1.611124 1.615000 0.113843 0.455385 0.467059 0.116715
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K123456789101121341561180	A(K) 0.41053 0.40958 1.0458 1.04488 1.2898 1.22898 1.3883 1.44669 1.553496 1.553496	R (K8455 1 6455 3 • 1588 3 • 1588 2 • 4157 2 • 4157 2 • 4157 2 • 2154 2 • 207 2 • 2154 2 • 2154	REJ/HI 0.0015 0.0076 0.0113 0.0129 0.0135 0.0141 0.0142 0.0143 0.0143 0.0144 0.0144 0.0144 0.0144	BAB(LITY ACC/H1 0.0284 0.1448 0.1448 0.2171 0.2669 0.2721 0.27721 0.2773 0.2773 0.2778 0.2778 0.2778 0.2778	OF THE EVE REJ/H52 0.15425 0.37442 0.36669 0.33506 0.35533 0.35583 0.35583 0.344651 0.344651 0.34465 0.34491 0.35522 0.35522	ACC/H2 0.0082 0.0198 0.0198 0.0197 0.0199 0.0188 0.0188 0.0182 0.0182 0.0182 0.0184 0.0186 0.0186 0.0188
			0.0147 0.0148 0.0148	0.2789 0.2813 0.2815	0.3522 0.3524 0.3554	0.0185 0.0185 0.0187

K1234567890123456789	A (116465 0 0 . 48465 1.16646 1.166465 1.166465 1.166465 1.166465 1.166465 1.166465 1.1	R ( ) 1 4 3 3 3 8 8 1 0 9 9 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	PROBA PROBA 1411 0.01416 0.01516 0.01516 0.0191 0.0191 0.0191 0.0191 0.0191 0.0193 0.0193 0.0194 0.0194 0.0194	ABILITY ACC/HI 0.0788 0.2846 0.3389 0.3581 0.3640 0.3636 0.3636 0.3636 0.3650 0.3650 0.3668 0.3679 0.3678 0.3678 0.3678 0.3678 0.3678 0.3678	REJ/H2 0.2086 0.3923 0.3849 0.3694 0.3694 0.35511 0.3476 0.3428 0.3418 0.3408 0.3399 0.3399 0.3399 0.3399	ACC / H2 0.0232 0.0436 0.0431 0.0421 0.0421 0.0399 0.0386 0.0388 0.0381 0.0378 0.0378 0.0378 0.0377
19 20		1.9065	0.0154	0.3679	0.3388	0.0376

# THE RESULTS OF THIS CASE ARE

K1234567890112345678	A [K] 0.90234 1.55443 1.650443 1.75844 1.75844 1.75844 1.75844 1.75844 1.79045 1.88706 1.88706 1.99124 1.99298	R (K) 166 0557501 20557501 20557501 20557501 2057701 2	REJ/H1 000764 0007214 0007216 00072236 00072236 000722332 000722333 000722334 000722344 00072344	ABILITY ACC/H1 00.44065 00.44666 00.44469 00.44437 00.4423 00.4423 00.4423 00.4423 00.4436 00.4436 00.4436 00.4436 00.4436 00.4436 00.4436 00.4436 00.4436	THE EVEN REJ/H2 0.2484 0.4181 0.3854 0.3814 0.3701 0.3623 0.3528 0.3528 0.3458 0.3458 0.3458 0.3458 0.3458	ACC/H2 0.0438 0.0680 0.0673 0.0653 0.0639 0.0639 0.0613 0.0613 0.0610 0.0600 0.0600

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.5 ALPHA = 0.05 BETA = 0.20

THE RESULTS OF THIS CASE ARE

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.5 ALPHA = 0.10 BETA = 0.05

		0.0.0	BABILITY	OF THE EV	CAT
K A()	K1 R(K)	REJZHI	1F\30A	REJIHZ	ACC/H2
1 0.0			0.0381	0.2099	0.0110
		0.0182	0.1639	0.4142	0.0218
2 0.44				0.4287	
_ 3 0.7			0.2183		0.0226
4 0.90			0.2394	0.4245	0.0224
5 1.0			0.2470	0.4165	0.0219
6 1.1			0.2515	0.4115	0.0217
7 1.19			0.2541	0.4082	0.0215
8 1.24			0.2553	0.4058	0.0214
9 1.2	865 1.7945	0.0284	0.2553	0.4040	0.0213
10 1.3.	206 1.7578	1).11284	0.2561	0.4028	0.0212
11 1.34	486 1.7283	0.0285	0.2561	0.4019	0.0212
1:3	727 1.7050	0.0283	0.2595	0.4043	0.0213
13 1.39	930 1.6858	0.0289	0.2602	0.4069	0.0214
14 1.4	398 1.6701	0.0288	0.2592	0.4060	0.0214
15 1.4	243 1.6569	0.0289	0.2597	0.4055	0.0213
16 1.4	367 1.6458	0.0388	0.2543	0.4103	0.0216
17 1.4			0.2574	0.4101	0.0216
18 1.4		0.0301	0.2704	0.4301	0.0226
			0.2604	0.4315	0.0227
13 1:49			0.2479	0.4235	0.0223

# 

THE PESULTS OF THIS CASE ARE

				PRCE	BABILITY	OF THE EVE	TIA
K		A(K)	P.(K)	REJ/H1	ACC/H1	REJ/HZ	ACC/H2
ï		0.1597	6.4244	0.0116	0.1048	0.2802	0.0311
2_		0.7222	3.1698	0.0346	0.3113	0.4682	0.0520
3		1.0070	2.5352	0.0374	0.3392	0.4451	0.0495
4		1.1845	2.2465	0.0390	0.3521	0.4367	0.0485
5		1.3006	2.0887	0.0392	0.3533	9.4264	0.0474
6		1.3819	1.9906	0.0393	0.3539	0.4196	0.0466
(		1.4414	1.9248	0.0394	0.3546 0.3553	0.4153	0.0461
8		1.4864	1.8441	0.0395	0.3558	0.4124	0.0458 0.0456
		1.5485	1.8183	0.0396	0.3552	0.4100	0.0456
10		1.5703	1.7984	0.3356	0.3561	7.4087	0.0454
iż		1.5879	1.7826	0.0396	0.3560	0.4080	0.0453
13		1.6023	1.7700	0.0395	0.3553	0.4071	0.0452
14		1.6141	1.7557	0.0394	0.3546	0.4059	0.0451
15		1.6240	1.7511	0.0394	0.3547	0.4054	0.0450
16		1.6325	1.7440	0.0394	0.3548,	0.4049	0.0450
17		1.6399	1.7379	0.0396	0.3569	0.4065	0.0452
18	-	1.6463	1.7327	0.2398	0.3581	0.4098	0.0455
19		1.6517	1.7283	0.0396	0.3576	0.4098	0.0455
20		1.6564	1.7247	0.0394	0.3570	0.4090	0.0454

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.5 4LPHA = 0.10 BETA = 0.15

THE RESULTS OF THIS CASE ARE

К	A(K)	9 (K)	PRUE REJ/H1	BABILITY ACC/H1	OF THE EVE	NT ACC/H2
1	0.3053	5.5603	0.0212	0.1907	0.3325	0.0587
3 4	1.2586	2.4557	0.0477	0.4351	0.4530	0.0799
4 5 6	1.5294 1.5996	2.1053	0.0488	0.4404	0.4342	0.0766
7 8	1.6492 1.6855	1.9799	0.9487 0.9487	0.4387	0.4238	0.0748
10	1.7127 1.7336	1.9201	0.0488	0.4391	0.4133	0.0740
11	1.7499 1.7628	1.8873	0.0489	0.4401	0.4170	0.0736
13	1.7732 1.7815	1.8677	0.0490	0.4411	0.4154	0.0733
15 16	1.7884	1.3553	0.0491	0.4421	0.4141	0.0731
17	1 • 798 7 1 • 8025	1.8473	0.0483	0.4423	0.4122	0.0727 0.0718 0.0694
19 20	1.8056 1.8081	1.8431	0.)405 C.)331	0.4359	0.3935	0.0662

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.5 ALPHA = 0.10 BETA = 0.20
THE RESULTS OF THIS CASE ARE

K12345678901123456789	A (4935581 0.425581 1.88472258 11.88472258 11.89078 11.99234945 11.9923494 11.9945021	R ( 94 22 35 32 26 36 37 32 26 36 37 37 37 37 37 37 37 37 37 37 37 37 37	REJ/H1 0.0320 0.05574 0.055774 0.055774 0.055775 0.055777 0.055777 0.055778 0.055778 0.055778 0.03306 0.03306 0.03306	BABILITY 11C/9H17 00.5541873 00.5512916 00.551773 00.5517751 00.5517751 00.55120053 00.55120053 00.55120053 00.55120053 00.55120053	OF THE EVE REJ/H54 0.55504 0.45014 0.45016 0.43308 0.42377 0.42263 0.42267 0.42355 0.33535 0.33537	ACC/H2 0.0939 0.1276 0.1145 0.1126 0.1090 0.1082 0.1076 0.1067 0.1067 0.1065 0.1060 0.1063 0.0944 0.09881
18	1.9502	1.9749	0.0262	0.4919	0.3527	0.0881
19	1.9521	1.9751	0.0209	0.4855	0.3387	0.0846
20	1.9540	1.9752	0.0202	0.4848	0.3375	0.0844

C1 = 1.0 (2 = 3.5 ALPHA = 0.15 HETA = 0.05 THE PESULTS OF THIS CASE ARE

K A (K) P(K) 1 0.0675 6.9539 2 0.4683 3.2376 3 0.7276 2.4695 4 0.8970 2.1313 5 1.0121 1.9462 6 1.0951 1.8305 7 1.1572 8 1.6557 10 1.2731 1.6236 11 1.2978 1.5797 10 1.2731 1.6236 11 1.2978 1.5797 13 1.3345 1.5635 14 1.3438 1.5503 15 1.3626 1.5385 16 1.3726 1.5229 18 1.3855 1.5173 19 1.3855 1.5173	PPOBABIL: REJ/H1 ACC 0.0081 0.06 0.0309 0.1 0.0383 0.2 0.0413 0.2 0.0428 0.2 0.0431 0.2 0.0434 0.2 0.0435 0.2 0.0441 0.2 0.0441 0.2 0.0441 0.2 0.0441 0.2 0.0445 0.2 0.0455 0.2 0.0455 0.2	7H1 REJ/H2 749 0.2523 ( 749 0.4636 ( 749 0.4636 ( 749 0.4601 ( 749 0.4601 ( 749 0.4601 ( 749 0.4601 ( 749 0.4431 ( 749 0.4	TACC/H2 ACC/H23 ACC/H2
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#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.5 ALPHA = 0.15 BETA = J.10

THE RESULTS OF THIS CASE ARE

K12345678901234567890	A (K) 22 0.173345 1.17370 1.2747 1.349305 1.45899 1.45899 1.531865 1.45969 1.554969 1.554969 1.554969	R (K) 5.5058 2.7783 2.2562 2.01884 1.8888 1.87561 1.7190 1.66717 1.65563 1.66263 1.66250 1.66150 1.661070 1.66041	REJ/H1 0.02274 0.0574 0.0597 0.0613 0.0613 0.0613 0.0613 0.0614 0.0620 0.0620 0.0620 0.0612 0.0612	8 A B I L I T Y A C C / T I T Y A C C / T I T Y Y I T Y Y I T Y Y I T Y Y I T Y Y I T Y Y I T Y Y I T	OF THE EVE REJ/H61 0.33203 0.48797 0.46396 0.45577 0.45572 0.45540 0.45581 0.45581 0.45581 0.45581 0.45581 0.45581 0.45581	ACC/H2 0.0373 0.0573 0.0543 0.05533 0.05215 0.0508 0.0509 0.0509 0.0509 0.0509 0.0509 0.0509 0.0509 0.0509
20	1.5578	1.6041	0.0609	0.3505	0.4649	0.0512

THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.5 ALPHA = 0.15 BETA = 0.15

THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT REJ/H1 ACC/H1 REJ/H2 ACC/H2 A(K) R(K) 0.367519 4.655236 0.039686 0.224886 0.397750 0.070199 1.015841 2.560737 0.156831 0.892446 1.093578 0.191941 1.265061 2.169504 0.076889 0.437599 0.503743 0.088524 3 1.406152 1.992530 0.077438 0.440488 0.493190 0.086826 5 1.491913 1.897351 0.077466 0.439073 0.484819 0.085335 1.548393 1.839889 0.077587 0.439703 0.479559 0.084969 1.586538 1.803052 0.077349 0.438331 0.475223 0.083838 8 1.613704 1.777901 0.077446 0.438870 0.472839 0.083468 9 1.633446 1.760169 0.077476 0.438994 0.470954 0.082954 1.648350 1.747212 0.077787 0.440776 0.470085 0.083235 10 11 1.659430 1.737705 0.077624 0.439853 0.468586 0.082306 1.667988 1.730492 0.077745 0.440551 0.467951 0.082133 12 1.674828 1.724895 0.078221 0.443247 0.468077 0.083016 13 14 1.680153 1.720593 0.078248 0.443403 0.467469 0.082736 15 1.684331 1.717242 0.078215 0.443215 0.466920 0.082278 1.687733 1.714570 0.078531 0.445006 0.467073 0.082856 16 17 1.690423 1.712463 0.078425 0.444413 0.466534 0.082262 1.692634 1.710760 0.078681 0.445862 0.466691 0.082740 1.694399 1.709400 0.078532 0.445014 0.466186 0.082053 18 19 20 1.695861 1.708288 0.078738 0.446180 0.466325 0.082434

C1 = 1.0 C2 = 3.5 ALPHA = 0.15 BETA = 0.20

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE LVENT R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 A(K) 0.599716 4.058400 0.060021 0.340116 0.447654 0.111987 1 1.288261 2.437154 0.193304 1.101313 1.125481 0.280817 2 3 1.513453 2.141748 0.092632 0.526409 0.515837 0.128738 4 1.630395 2.012653 0.092011 0.524282 0.504624 0.125829 5 1.697586 1.944721 0.092231 0.522715 0.498603 0.124268 1.738913 1.905452 0.092170 0.522327 0.494387 0.123452 6 7 1.765577 1.881151 0.092219 0.522501 0.491838 0.122891 1.783386 1.865401 0.092279 0.522886 0.490176 0.122435 8 9 1.795649 1.854817 0.092416 0.523673 0.489174 0.122255 10 1.804214 1.847539 0.092446 0.523850 0.488331 0.121727 1.810395 1.842394 0.092698 0.525283 0.488069 0.122093 11 12 1.814889 1.838714 0.092879 0.526306 0.487827 0.122269 1.818178 1.836053 0.092991 0.526946 0.487596 0.122242 13 1.820604 1.834107 0.093052 0.527292 0.487369 0.122062 14 1.822406 1.832670 0.093082 0.527463 0.487157 0.121804 15 16 1.823754 1.831599 0.093083 0.527459 0.486943 0.121458 17 1.824782 1.830792 0.093235 0.528326 0.486980 0.121782 18 1.825558 1.830183 0.093202 0.528142 0.486770 0.121383 1.826150 1.829720 0.093237 0.528331 0.486683 0.121277 1.826605 1.829366 0.093296 0.528693 0.486643 0.121333 19 20

#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.5 ALPHA = 0.20 BETA = 0.05

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT A(K) R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 0.077599 6.250000 0.013139 0.052367 0.290032 0.015250 2 0.481112 2.943750 0.090333 0.361889 1.004055 0.052498 3 0.724143 2.272056 0.053022 0.212443 0.494974 0.025581 0.884795 1.968221 0.057242 0.229778 0.492156 0.025761 0.994241 1.801148 0.059234 0.237303 0.485516 0.025962 1.070229 1.699502 0.059469 0.238048 0.477069 0.025574 4 5 6 1.124201 1.632781 0.058748 0.235076 0.469140 0.024609 7 8 1.165914 1.584386 0.059003 0.236039 0.466166 0.024328 9 1.198498 1.548414 0.059030 0.236134 0.462995 0.024027 10 1.225011 1.520473 0.059498 0.238000 0.461607 0.024108 1.246071 1.498936 0.059259 0.237043 0.458578 0.023730 1.264017 1.481275 0.059992 0.239966 0.458710 0.024074 1.278447 1.467344 0.059625 0.238503 0.455921 0.023650 11 12 13 1.290896 1.455654 0.060140 0.240563 0.456008 0.023861 14 1.301340 1.446034 0.060164 0.240659 0.454755 0.023746 15 16 1.310419 1.437868 0.060583 0.242336 0.454736 0.023943 17 1.317865 1.431195 0.060058 0.240233 0.452492 0.023383 18 1.324415 1.425407 0.060295 0.241186 0.452549 0.023388 19 1.330184 1.420390 0.060556 0.242227 0.452502 0.023467 20 1.335276 1.416036 0.060811 0.243249 0.452417 0.023576

C1 = 1.0 C2 = 3.5 ALPHA = 0.20 RETA = 0.10

THE RESULTS OF THIS CASE ARE

K 1 2 3 4 5 6 7 8 9	A (K) 0.2209 0.7737 1.0140 1.1562 1.30452 1.3472 1.3776 1.4014	R(K) 4.8162 2.4815 2.0401 1.8396 1.7310 1.6649 1.66214 1.5696	REJ/H1 0.0355 0.0834 0.1859 0.1858 0.0858 0.0858 0.0858	ABILITY ACC/H1 0.1420 0.3335 0.3434 0.2432 0.3434 0.34434 0.34447	RFJ/H2 0.3853 7.5623 0.5262 0.5169 0.5077 0.5077 0.4986 0.4964	ACC/H2 0.0428 0.0625 0.0525 0.0574 0.0554 0.0558 0.0552
1.0	1.4179	1.5534	0.0867	0.3469	0.4971 0.4993	0.0552
12 3 14 15 14	1.4314 1.4418 1.4502 1.4568 1.4621	1.5413 1.5321 1.5248 1.5140 1.5145	0.0868 0.0865 0.0871 0.0868 0.0864 0.0859	0.3472 0.3461 0.3482 0.3472 0.3461	0.4991 0.4787 0.5054 0.5061 0.5059	0.0555 0.0554 0.0561 0.0562 0.0562
17	1.4699 1.4724 1.4747 1.4767	1.5079 1.5057 1.5040 1.5027	0.(849 0.0814 0.0786 0.0738	0.3430 0.3349 0.3347 0.3337	0.5073 0.4988 0.4929 0.4856	0.0564 0.0554 0.0539

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 3.5 ALPHA = 0.20 BETA = 0.15

#### THE RESULTS OF THIS CASE ARE

			PRO	DBABILITY	OF THE EV	ENT
K	A(K)	R(K)	REJ/Hl	ACC/H1	REJ/H2	ACC/H2
1	0.422587	3.977585	0.063479	0.253914	0.454877	0.080284
2	1.040325	2.264232	0.226407	0.908354	1.180657	0.207422
3	1.261152	1.946343	0.109834	0.439361	0.547077	0.096244
4	1.379957	1.806116	0.109921	0.439723	0.536767	0.094498
5	1.449653	1.732385	0.109648	0.438652	0.529432	0.093341
6	1.493410	1.689095	0.109532	0.438146	0.524936	0.092524
7	1.522505	1.661701	0.109794	0.439183	0.522523	0.092423
8	1.542253	1.643679	0.109767	0.439069	0.520506	0.091783
9	1.556303	1.631252	0.110218	0.440874	0.519813	0.092110
10	1.566178	1.622616	0.109935	0.439742	0.518361	0.090977
11	1.573570	1.616317	0.110556	0.442226	0.518522	0.091760
12	1.579004	1.611742	0.110589	0.442359	0.517942	0.091378
13	1.583042	1.608364	0.110523	0.442095	0.517382	0.090800
14	1.586144	1.605808	0.110870	0.443483	0.517485	0.091176
15	1.588534	1.603866	0.111154	0.444619	0.517546	0.091476
16	1.590381	1.602383	0.111375	0.445501	0.517577	0.091676
17	1.591811	1.601244	0.111532	0.446129	0.517575	0.091770
18	1.592900	1.600373	0.111233	0.444938	0.517004	0.090830
19	1.593759	1.599691	0.111371	0.445488	0.517030	0.090925
20	1.594436	1.599156	0.111437	0.445747	0.516970	0.090875

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 4.0 ALPHA = 0.05 8ETA = 0.05

			PROS	YTIJIBAB	OF THE EVE	ENT
K	A(K)	R(K)	REJ/H1	ACC/H1	REJ/H2	ACC/H2
1	0.0677	8.6948	0.0024	0.0459	0.2216	0.0117
2	0.5162	4.0405	0.0107	0.2032	0.4258	0.0224
3	0.8269	3.0527	0.0142	0.2723	0.4369	0.0231
4	1.0305	2.6258	0.0156	0.2984	0.4308	0.0227
Ś	1. 1710	2.3923	0.0161	0.3081	0.4216	0.0222
2	1.2738	2.2466	0.0165	0.3135	0. 4154	0.0219
6	1.3507	2.1490	0.0166	0.3151	0.4097	0.0216
,	1.4105					
8		2.0792	0.0166	0.3165	0.4059	0.0214
	1.4580	2.0272	0.0167	0.3172	0.4030	0.0212
10	1.4964	1.9873	0.0167	0.3177	0.4008	0.0211
-11	1.5285	1.9556	0.0168	0.3198	0.4015	0.0211
12	1.5552	1.9302	0.0168	0.3201	0.4011	0.0211
13	1.5776	1.9096	0.0169	0.3202	0.4008	0.0211
14	1.5974	1.8922	0.0170	0.3235	0.4029	0.0212
15	1.6143	1.8777	0.0171	0.3240	0.4054	0.0213
16	1.6287	1.8657	0.0170	0.3234	0.4050	0.0213
17	1.6410	1.8555	0.0170	0.3227	0.4042	0.0213
iá	1.6520	1.8466	0.0170	0.3236	0.4037	0.0212
19	1.6614	1.8389	0.0169	0.3220	0.4002	0.0211
20	1.6699	1.8321	0.0170			
20	1.0099	1.0321	0.0110	0.3237	0.4070	0.0214

C1 = 1.0 C2 = 3.5 ALPHA = 0.20 BETA = 0.20

# THE RESULTS OF THIS CASE ARE

			PRO	DBABILITY	OF THE LY	JENT
K	A(K)	R(K)	REJ/H1	ACC/H1	REJ/112	ACC/h2
1	0.689435	3.396296	0.094976	0.379903	0.510375	0.127626
2	1.313976	2.143681	0.277575	1.113757	1.214879	0.303073
3	1.499843	1.920053	0.131987	0.530054	0.562928	0.140441
4	1.589666	1.826141	0.131528	0.527676	0.553994	0.138232
5	1.637564	1.779421	0.131481	0.525942	0.548991	0.136768
6	1.665059	1.753792	0.131434	0.525714	0.546052	0.136079
7	1.681768	1.738751	0.131744	0.526971	0.544705	0.136309
8	1.692141	1.729602	0.131800	0.527198	0.543631	0.135856
9	1.698809	1.723327	0.132031	0.528126	0.543179	0.135939
10	1.703156	1.720105	0.132119	0.528475	0.542771	0.135669
11	1.706073	1.717647	0.132451	0.529806	0.542811	0.136202
12	1.708013	1.716015	0.132330	0.529315	0.542399	0.135419
13	1.709343	1.714907	0.132535	0.530139	0.542449	0.135694
14	1.710261	1.714149	0.132714	0.530858	0.542509	0.135946
15	1.710897	1.713627	0.132803	0.531228	0.542500	0.135965
16	1.711340	1.713265	0.132852	0.531415	0.542469	0.135881
17	1.711649	1.713012	0.132914	0.531663	0.542466	0.135867
18	1.711868	1.712835	0.133005	0.532031	0.542509	0.135980
19	1.712022	1.712710	0.133102	0.532427	0.542594	0.136130
20	1.712131	1.712622	0.133003	0.531942	0.542387	0.135624

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 4.0 ALPHA = 0.05 BETA = 0.10

# THE RESULTS OF THIS CASE ARE

			PRCI	BABILITY	OF THE EVI	ENT
K	A(K)	R(K)	REJ/H1	ACC/H1	REJ/H2	ACC/H2
1	0.1834	7.3143	0.0063	0.1194	0.2815	0.0313
2	0.8244	3.6245	0.0193	0.3671	0.4673	0.0519
3	1.1475	2.9116	0.0207	0.4035	0.4406	0.0490
4	1.3514	2.5827	C.J218	0.4215	0.4325	0.0481
5	1.4850	2.4032	0.0221	0.4234	0.4214	0.0468
6	1.5789	2.2920	0.0222	0.4240	0.4135	0.0460
7	1.6476	2.2176	0.0223	0.4240	0.4077	0.0453
8	1.6556	2.1650	0.0223	0.4243	0.4035	0.0448
9	1.7401	2.1263	0.0223	0.4247	0.4005	0.0445
10	1.7722	2.0968	0.0224	0.4252	0.3982	0.0442
11	1.7981	2.0739	0.0224	0.4258	0.3963	0.0440
12	1.8193	2.0558	0.0224	0.4263	0.3948	0.0439
13	1.8368	2.0412	0.0225	0.4268	0.3936	0.0437
14	1.8515	2.0293	0.3225	0.4273	0.3926	0.0436
15	1.8639	2.0194	0.0225	0.4277	0.3924	0.0436
16	1.8744	2.0112	0.0225	0.4278	0.3918	0.0435
17	1.8834	2.0043	0.0225	0.4280	0.3911	0.0435
18	1.8912	1.9985	0.0226	0.4291	0.3918	0.0435
19	1.8979	1.9935	0.0225	C. 4290	0.3920	0.0436
20	1.9037	1.9893	0.0224	0.4285	0.3913	0.0435

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 4.0 ALPHA = 0.05 BETA = 0.15

K A(K) R(K) 1 0.3400 6.4957 1.1114 3.4325 3 1.4292 2.8804 4 1.6265 2.60957 6 1.8350 2.37133 8 1.9395 2.27118 19 1.9732 2.2411 10 1.9732 2.2411 11 2.0199 2.2191 11 2.0199 2.1884 13 2.0497 2.1778 14 2.0697 2.1623 15 2.0497 2.1567 17 2.0835 2.1451 17 2.0885 2.1458 18 2.0988 2.1483 19 2.0987 2.1484	REJ/H1 0.0111	BILC/H10 00-24974 00-54974 00-55121 00-55121 00-55121 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224 00-551224	REJ/H2 0.4410 0.4462 0.4377 0.44322 0.4210 0.44089 0.4021 0.4004 0.3588 0.3574 0.3963 0.3974 0.3963 0.3924 0.3899 0.3899	ACC / H2 0.08758 0.07763 0.07763 0.07743 0.07715 0.077107 0.077107 0.077107 0.077107 0.07706
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	THIS CASE H	AS PARAMETERS AS F	DLLOWS
C1 -	= 1.0 C2 = 4.0		BETA = 0.20
_		ULTS OF THIS CASE	
K	A(K) R(K)	PROBABILITY REJ/H1	OF THE EVENT REJ/H2 ACC/H2 0.3582 0.0896 0.4954 0.1238 0.4343 0.1086 0.4301 0.1076
K 2 3 4 5 6 7 8 9 10 11 12 11 11 11 11 11 11 11 11 11 11 11	A(K) 0.5415 5.9241 1.4022 3.38956 1.8900 2.6717 2.0028 2.5503 2.0769 2.1281 2.1281 2.3732 2.2124 2.3732 2.2281 2.3535 2.2281 2.32338 2.2501 2.3263 2.2507 2.2778 2.3115 2.2779 2.3111 2.2779 2.3115	0.0165 0.3129	RÉJ/H2 ACC/H2 0.3582 0.0896 0.4954 0.1238 0.4343 0.1086 0.4301 0.1076 0.4207 0.1052 0.4143 0.1036 0.4100 0.1025 0.4070 0.1012 0.4070 0.1018 0.4049 0.1012 0.4033 0.1008 0.4021 0.1005 0.4011 0.1003 0.4011 0.1003 0.4004 0.1001
3	1.7056 2.8956	0.0287 .0.5813	0.4343 0.1086
5	2.0028 2.5503	0.0304 0.5880	0.4207 0.1052
7 -	2.1281 2.4291	0.0307 0.5851	0.4100 0.1025
9	2.1919 2.3732	0.0308 0.5853	0.4049 0.1012
11	1.8900 2.6717 2.0028 2.5503 2.0769 2.4768 2.1281 2.4291 2.1919 2.3732 2.2124 2.3562 2.2281 2.3435 2.2281 2.3435 2.2501 2.3263 2.25078 2.3204 2.2508 2.3159 2.2638 2.3159 2.27723 2.3114 2.27723 2.3114 2.2779 2.3115	0.0309 0.5864	0.4207 0.1052 0.4143 0.1036 0.4100 0.1025 0.4070 0.1018 0.4049 0.1012 0.4033 0.1008 0.4021 0.1005 0.4011 0.1003 0.4004 0.1001 0.3994 0.0999 0.3903 0.0976 0.3054 0.0861 0.3444 0.0861 0.3459 0.0765
13	2.2501 2.3263	0.0309 0.5876	0.4004 0.1001
15	2.2639 2.3159	0.0305 0.5882	0.3975 0.0994
17	2.2723 2.3114	0.0216 0.5774	0.3903 0.0976 0.3664 0.0916 0.3444 0.0861 0.3446 0.0861 0.3059 0.0765
19	2.2779 2.3105	0.0154 0.5707	0.3446 0.0861
20	202177 - 203447	0.0003 0.5540	0.3034 0.0103
-			
	THIS CASE H	AS PARAMETERS AS E	OLLOWS
C 1	= 1.0 C2 = 4.0		BETA = 0.05
	THE RES	OULTS OF THIS CASE	ARE
		PROBABILITY	OF THE EVENT
K 1	A(K) R(K) 0.0869 7.2669 0.5486 3.4231	PROBABILITY REJ/H1 ACC/H1 0.0065 0.0584	OF THE EVENT REJ/H2 ACC/H2 0.2839 0.0149
2 3	0.0869 7.2669 0.5486 3.4231 0.8324 2.6371	0.0244 0.2194 0.0297 0.2673	0.4948 0.0260
5	0.0869 7.2663 0.8324 2.6371 1.0156 2.2911 1.1396 2.1021 1.2285 1.9844 1.2948 1.9052 1.3456 1.8490 1.3855 1.8075 1.4184 1.7753	0.0318 0.2863 0.0324 0.2920	0.4895 0.0258 0.4818 0.0254 0.4717 0.0248 0.4650 0.0245
6	1.1396 2.1021 1.2285 1.9844 1.2948 1.9052	0.0328 0.2951	0.4650 0.0245 0.4606 0.0242
8 9	1.2948 1.9052 1.3456 1.8490 1.3855 1.8075	0.0331 0.2991 0.0332 0.2988	0.4576 0.0241 0.4556 0.0240
10	1.3855 1.8075 1.4184 1.7753 1.4448 1.7505 1.4658 1.7312	0.0336 0.3027 0.0336 0.3027	0.4595 0.0242 0.4587 0.0241
12	1.4658 1.7312 1.4831 1.7155 1.4983 1.7022	0.0297 0.2673 0.0318 0.2863 0.0324 0.2920 0.0328 0.2951 0.0331 0.2969 0.0331 0.2969 0.0332 0.2988 0.0336 0.3027 0.0336 0.3027 0.0336 0.3027	0.4574 0.0241 0.4614 0.0243
14	1.4831 1.7155 1.4983 1.7022 1.5129 1.6905	0.0337 0.3039 0.0348 0.3129 0.0340 0.3059	0.4625 0.0243 0.4773 0.0251
16 17	1.4983 1.7022 1.5129 1.6905 1.5238 1.6817 1.5319 1.6747 1.5390 1.6685	0.0340 0.3059 0.0329 0.2959 0.0328 0.2948	0.4650 0.0242 0.4676 0.0242 0.4576 0.0242 0.4555 0.0242 0.4587 0.0242 0.4587 0.0241 0.4574 0.0241 0.4614 0.0241 0.4612 0.0251 0.4773 0.0251 0.4728 0.0249 0.4728 0.0249 0.4728 0.0249
K 12345678901123456789011234567890	1.5444 1.6633	0.0297 0.2673 0.0297 0.2673 0.0318 0.2863 0.0324 0.2950 0.0336 0.2951 0.0331 0.2969 0.0336 0.3027 0.0336 0.3027 0.0336 0.3027 0.0336 0.3027 0.0336 0.3027 0.0338 0.2988 0.0340 0.3059 0.0340 0.3059 0.0348 0.2865 0.0328 0.2948 0.0318 0.2865	
20	1.5485 1.6587	0.0309 0.2784	0.4822 0.0254
	THIS CASE H		DLLOWS
<u>C1</u> :	= 1.0 $C2 = 4.0$	ALPHA = 0.10	BETA = 0.10
	THE KES	ULTS OF THIS CASE	AR E
V	A(V) D(V)	PPOBARILITY PEJ/H1 ACC/H1	OF THE EVENT PEJ/H2 ACC/H2 0.3596 0.0400
1	A(K) R(K) 0.2353 5.9021 0.8711 3.0201	0.0167 0.1505 0.0429 0.3857	0.3596 0.0400 0.5384 0.0598
3	0.8711 3.0201 1.1571 2.4769	PPOBABILITY PEJ/H1 ACC/H1 0.0167 0.1505 0.01429 0.3857 0.0440 0.3995 0.0453 0.4098	0.5010 0.0557
5	1.1571 2.4769 1.3309 2.2269 1.4417 2.0914 1.5174 2.0082 1.5714 1.9531	0.0454 0.0454 0.0454 0.4092	0.4806 0.0534
7	1.5174 2.0082 1.5714 1.9531	0.0454 0.4091 0.0455 0.4093	0.4693 0.0521
9	1.5714 1.9531 1.6114 1.9146 1.6416 1.8866 1.6651 1.8657	0.0455 0.4098	0.3596 0.0400 0.5384 0.0598 0.5010 0.0557 0.4914 0.05546 0.4737 0.0526 0.4693 0.0521 0.4664 0.0518 0.4665 0.0516 0.4645 0.0516
11	A(K) 0.2353 0.8711 3.0201 1.1571 1.3309 2.2269 1.4417 2.0914 1.5714 2.0982 1.5714 1.6114 1.9531 1.6114 1.9146 1.6416 1.64651 1.88657 1.6836 1.8497 1.6836 1.8497 1.68494 1.8372	0.0457 0.4109	0.4631 0.0515 0.4621 0.0513 0.4613 0.0512 0.4629 0.0514
13	1.1571 2.4769 1.3309 2.2269 1.4417 2.0914 1.5174 2.0082 1.5714 1.9531 1.6114 1.9146 1.6651 1.8667 1.66836 1.8497 1.6984 1.8372 1.7104 1.8272 1.7204 1.8128 1.7286 1.8128	0.1429 0.3857 0.3440 0.3195 0.0453 0.4098 0.0454 0.4096 0.1454 0.4091 0.0455 0.4093 0.0455 0.4093 0.0456 0.4103 0.1457 0.4103 0.1457 0.41125 0.0458 0.4125	0.4629 0.0514
15	1.7204 1.8192 1.7286 1.8128	0.3460 0.4143 0.3461 0.4145 0.3460 0.4145	0.4649 0.0517
K 12 3 4 5 6 7 8 9 10 11 12 13 14 15 16 7 18 12 18 12 12	1.7409 1.8033	0.0457 0.4134	0.4644 0.0516 0.4639 0.0515 0.4614 0.0513
19	1.7454 1.7998 1.7493 1.7971 1.7526 1.7951	0.0451 0.4117 0.1438 0.4110 0.0409 0.4092	0.4581 0.0509
20	1.7526 1.7951	0.0409 0.4092	0.4510 0.0501

C1 = 1.0 C2 = 4.0 ALPHA = 0.10 BETA = 0.15

#### THE RESULTS OF THIS CASE ARE

23 1.1 3 1.4 4 5.6 6 1.7 7 1.8 8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8	363 5.1 1715 2.2 1438 2.2 1959 2.1 1960 2.	K	290 0.55 5748 0.55 5577 0.55 5557 0.55 5557 0.55 5557 0.55 5558 0.55 5558 0.55 5564 0.55 5564 0.55 5568 0.44	144 0.5577 013 0.5066 061 0.4976 037 0.4881 027 0.4782 032 0.4731 039 0.4745 039 0.4745 055 0.4731 061 0.4731 063 0.4713 0649 0.4666 07499 0.4666 07499 0.4493	0.0984 0.0894 0.0861 0.0861 0.0844 0.0844 0.0837 0.0833 0.0835 0.0835 0.0832 0.0832 0.0730
17 1.9	0153 1.9		304 0.48	894 0.4140	0.0730
18 1.9	0178 1.9		305 0.48	892 0.4157	0.0733
19 1.9	0198 1.9		165 0.4	756 0.3793	0.0669

#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 4.0 ALPHA = 0.10 BETA = 0.20

#### THE RESULTS OF THIS CASE ARE

#### PROBABILITY OF THE EVENT REJ/Hl ACC/H2 A(K) R(K) ACC/H1 REJ/H2 0.695589 4.556231 0.042505 0.382543 0.454056 0.113555 2 1.473628 2.758706 0.135872 1.231605 1.130448 0.282143 1.725102 2.437588 0.064943 0.589587 0.513627 0.128267 3 1.857686 2.294525 0.064917 0.588314 0.502661 0.125317 4 5 1.935054 2.218885 0.065297 0.587774 0.496131 0.124303 1.982598 2.175319 0.065166 0.586542 0.491019 0.123016 7 2.013318 2.148299 0.065121 0.585913 0.487934 0.121904 8 2.034157 2.130635 0.065215 0.586832 0.486146 0.121730 9 2.048529 2.118740 0.065232 0.587016 0.484759 0.121120 10 2.058789 2.110472 0.065376 0.588345 0.484030 0.121330 2.066184 2.104632 0.065469 0.589184 0.483433 0.121292 11 12 2.071565 2.100442 0.065518 0.589638 0.482942 0.121045 13 2.075520 2.097393 0.065537 0.589309 0.482524 0.120646 14 2.078450 2.095146 0.065528 0.589736 0.482145 0.120115 2.080690 2.093462 0.065690 0.591204 0.482138 0.120790 15 16 2.082364 2.092204 0.065635 0.590712 0.481790 0.120049 17 2.083658 2.091247 0.065777 0.591995 0.481829 0.120698 2.084642 2.090522 0.065777 0.591986 0.481664 0.120406 18 2.085407 2.089966 0.065881 0.592921 0.481706 0.120879 19 20 2.085991 2.089541 0.065859 0.592715 0.481559 0.120487

# THE RESULTS OF THIS CASE ARE

			PRO	BABILITY	OF THE LV	ENT
K	A(K)	R(K)	REJ/H1	ACC/H1	REJ/H2	ACC/H2
î	0.101353	6.384180	0.011972	0.067842	0.330783	0.017410
2	0.562493	3.049671	0.079389	0.450854	1.079253	0.056266
3	0.828267	2.376699	0.046048	0.262070	0.526001	0.030200
4	0.996915	2.077448	0.048895	0.277291	0.518436	0.027149
5	1.110498	1.913843	0.050008	0.283841	0.509567	0.027139
$\epsilon$	1.188677	1.814210	0.049957	0.283303	0.500568	0.026316
7	1.247275	1.746247	0.050500	0.286252	0.496429	0.026312
8	1.291733	1.698226	0.050693	0.287312	0.492126	0.026191
9	1.325910	1.663128	0.050638	0.286981	0.488258	0.025860
10	1.352533	1.636693	0.050415	0.285703	0.484918	0.025337
	1.374808	1.615538			0.484545	0.025644
11			0.050995	0.288934		
12	1.392419	1.599164	0.050648	0.287015	0.481480	0.025096
13	1.407375	1.585686	0.051029	0.289152	0.481183	0.025253
14	1.419741	1.574770	0.050995	0.288973	0.479669	0.025041
15	1.430345	1.565646	0.051278	0.290571	0.479335	0.025166
16	1.439460	1.558003	0.051540	0.292057	0.478934	0.025323
17	1.446862	1.551790	0.051055	0.289310	0.476756	0.024620
18	1.453659	1.546274	0.051772	0.293383	0.478101	0.025252
19	1.459213	1.541758	0.051287	0.290629	0.476023	0.024583
20	1.464355	1.537707	0.051955	0.294414	0.477302	0.025205

			0000	VIIIIOA	DE THE EVE	NT
K 1 2 3 4 5	A(K) 0.2746 0.8939 1.1523 1.3038 1.3982	R(K) 5.0311 2.6424 2.1975 1.9949 1.8857	PROB REJ/H1 0.0306 0.0694 0.0696 0.0708 0.0707	ABILITY ACC/+1 0.1733 0.3935 0.3956 0.4018 0.4011	OF THE EVEN REJ/H2 0.4182 0.5864 0.5451 0.5350 0.5253	ACC/H2 0.0465 0.0652 0.0606 0.0594 0.0584
6 7 8 9	1.4611 1.5050 1.5367 1.5602 1.5782	1.8195 1.7763 1.7465 1.7253 1.7096	0.0707 0.0707 0.0709 0.0710 0.0713	0.4008 0.4011 0.4019 0.4023 0.4043	0.5193 0.5155 0.5149 0.5139 0.5152	0.0577 0.0573 0.0572 0.0571 0.0572
11 12 13 14 15	1.5918 1.6023 1.6109 1.6177 1.6231	1.6980 1.6891 1.6821 1.6766 1.6722	0.0712 0.0711 0.0716 0.0715 0.0712	0.4037 0.4026 0.4057 0.4052 0.4044	0.5151 0.5138 0.5202 0.5210 0.5206	0.0572 0.0571 0.0578 0.0579 0.0578 0.0577
16 17 18 19 20	1.6274 1.6308 1.6335 1.6357 1.6377	1.6688 1.6663 1.6646 1.6638 1.6633	0.0704 0.0678 0.0627 0.0526 0.0467	0.4033 0.3993 0.3967 0.3891 0.3869	0.5190 0.5195 0.5095 0.4909 0.4805	0.0577 0.0566 0.0545 0.0533

#### C1 = 1.0 C2 = 4.0 ALPHA = 0.15 BETA = 0.15

#### THE RESULTS OF THIS CASE ARE

```
PROBABILITY OF THE EVENT
                R(K) REJ/hl ACC/Hl REJ/H2 ACC/H2
        A(K)
     0.509369 4.251683 0.052495 0.297470 0.478662 0.084484
      1.195510 2.466181 0.182678 1.037247 1.211295 0.212961 1.431956 2.142426 0.087897 0.499710 0.557881 0.097973
 3
      1.559233 1.998682 0.088043 0.500663 0.547403 0.096283
 5
      1.633848 1.922956 0.088235 0.500094 0.540441 0.095344
      1.679983 1.879054 0.087955 0.498448 0.535299 0.094005
      1.710386 1.851448 0.088038 0.498785 0.532564 0.093504
      1.731368 1.833191 0.088364 0.500695 0.531119 0.093832
      1.746048 1.820798 0.088538 0.501694 0.529942 0.093765
9
      1.756465 1.812179 0.088587 0.501979 0.528985 0.093344
10
      1.764113 1.806004 0.088872 0.503602 0.528684 0.093697
11
      1.769653 1.801561 0.088753 0.502924 0.527912 0.092829
12
      1.773809 1.798277 0.088901 0.503765 0.527702 0.092948
13
      1.776947 1.795826 0.089005 0.504365 0.527496 0.092790
14
      1.779332 1.793980 0.089075 0.504758 0.527301 0.092659
15
      1.781196 1.792568 0.089434 0.506789 0.527587 0.093550
16
      1.782617 1.791498 0.089417 0.506693 0.527370 0.093223
17
      1.783706 1.790678 0.089371 0.506429 0.527149 0.092810
18
      1.784564 1.790041 0.089578 0.507601 0.527305 0.093303
19
      1.785230 1.789549 0.089560 0.507497 0.527177 0.093042
20
```

#### THIS CASE LAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 4.0 ALPHA = 0.15 BETA = 0.20

```
PROBABILITY OF THE EVENT
                         REJ/H1 ACC/H1 REJ/H2 ACC/H2
        A(K)
                 R(K)
 1
    0.811918 3.718832 0.075949 0.430376 0.524965 0.131245
 2
     1.502696 2.383863 0.218551 1.238507 1.231359 0.306610
 3
      1.704155 2.150620 0.103685 0.590610 0.567762 0.141699
      1.801738 2.052376 0.103408 0.588644 0.558469 0.139583
 5
      1.853821 2.003512 0.103617 0.587201 0.553433 0.138267
6
     1.883690 1.976838 0.103639 0.587205 0.550316 0.137733
7
     1.901596 1.961345 0.103649 0.587310 0.548431 0.137161
8
     1.912758 1.951919 0.103751 0.587906 0.547386 0.136939
9
     1.919853 1.946009 0.103744 0.587875 0.546592 0.136290
10
      1.924513 1.942191 0.103896 0.588738 0.546269 0.136399
      1.927607 1.939684 0.103977 0.589203 0.545999 0.136275
11
12
      1.929684 1.938014 0.104008 0.589381 0.545765 0.135981
      1.931113 1.936882 0.104230 9.590649 0.545857 0.136649
13
14
      1.932085 1.936114 0.104181 0.590353 0.545638 0.136078
      1.932761 1.935584 0.104302 0.591050 0.545684 0.136371
15
16
      1.933231 1.935218 0.104339 0.591273 0.545644 0.136314
17
      1.933562 1.934962 0.104479 0.592075 0.545741 0.136797
      1.933791 1.934784 0.104379 0.591451 0.545576 0.136049 1.933952 1.934659 0.104355 0.591388 0.545485 0.135831
18
19
20
     1.934069 1.934571 0.104606 0.592776 0.545763 0.136891
```

C1 = 1.0 C2 = 4.0 ALPHA = 0.20 BETA = 0.05

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE EVENT A(K) R(K) REJ/hl ACC/Hl REJ/H2 ACC/H2 K 0.113841 5.720218 0.018969 0.075876 0.371117 0.019534 1 0.572223 2.764497 0.114416 0.459202 1.151428 0.059837 3 0.821959 2.174233 0.064087 0.257181 0.556413 0.029000 4 0.979194 1.909559 0.067550 0.270615 0.549308 0.028803 1.083123 1.765464 0.068820 0.275572 0.540697 0.028699 5 6 1.153507 1.678370 0.068545 0.274312 0.531940 0.027931 1.205504 1.619290 0.069146 0.276632 0.528183 0.027888 7 53 1.244435 1.577760 0.069331 0.277345 0.524347 0.027709 1.274003 1.547580 0.069206 0.276836 0.520879 0.027314 1.297459 1.524572 0.069528 0.278117 0.519256 0.027272 9 10 11 1.316217 1.506765 0.069728 0.278911 0.517660 0.027188 1.331341 1.492773 0.069808 0.279233 0.516180 0.027022 12 13 1.343996 1.481414 0.070350 0.281405 0.515975 0.027265 14 1.354007 1.472493 0.069754 0.279017 0.513494 0.026560 15 1.362521 1.465042 0.070053 0.280215 0.513408 0.026566 16 1.369778 1.458811 0.070356 0.281428 0.513214 0.026642 1.375982 1.453583 0.070634 0.282540 0.512993 0.026734 17 1.381300 1.449178 0.070876 0.283508 0.512774 0.026814 18 19 1.385873 1.445450 0.071077 0.284313 0.512561 0.026870 20 1.389815 1.442279 0.071237 0.284955 0.512350 0.026896

#### THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 4.0 ALPHA = 0.20 BETA = 0.10

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE LVENT R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 A(K) 0.308417 4.377274 0.048118 0.192473 0.468357 0.052042 2 0.904490 2.357272 0.197828 0.792106 1.248449 0.138320 1.138700 1.983039 0.097416 0.391013 0.581806 0.064427 1.271738 1.814650 0.098529 0.395451 0.572236 0.063478 1.353234 1.724188 0.099176 0.396800 0.565106 0.063133 5 1.404877 1.671042 0.098558 0.394271 0.558587 0.061772 1.440697 1.636383 0.099099 0.396409 0.556119 0.061935 6 7 1.465948 1.612998 0.099322 0.397291 0.553895 0.061776 8 1.484053 1.596711 0.099297 0.397190 0.552020 0.061255 9 10 1.497617 1.584875 0.099758 0.399035 0.551414 0.061479 11 1.507863 1.576154 0.100084 0.400338 0.550825 0.061568 12 1.515669 1.569635 0.100280 0.401126 0.550278 0.061493 13 1.521667 1.564697 0.100365 0.401465 0.549755 0.061260 1.526316 1.560907 0.100361 0.401447 0.549245 0.060904 14 1.529948 1.557964 0.100283 0.401135 0.548728 0.060445 15 16 1.532890 1.555620 0.100699 0.402801 0.548969 0.060851 1.535275 1.553752 0.101104 0.404421 0.549211 0.061300 17 18 1.537155 1.552282 0.100927 0.403716 0.548705 0.060778 19 1.538695 1.551095 0.101233 0.404934 0.548922 0.061096 20 1.539917 1.550151 0.100957 0.403832 0.548367 0.060426

C1 = 1.0 C2 = 4.0 ALPHA = 0.20 BETA = 0.15

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE LVENT R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 L(K)K 0.572258 3.610712 0.081859 0.327437 0.534893 0.094407 1 2 1.206369 2.178976 0.259459 1.039923 1.290235 0.226310 3 1.410057 1.920547 0.124565 0.498728 0.600883 0.105041 4 1.512420 1.810814 0.124024 0.497541 0.590823 0.104150 5 1.569369 1.754839 0.124253 0.497040 0.585524 0.103409 1.603278 1.723388 0.124374 0.497504 0.582281 0.103139 6 7 1.624213 1.704609 0.124262 0.497034 0.580043 0.102291 8 1.637785 1.692763 0.124466 0.497861 0.579006 0.102127 9 1.646747 1.685070 0.124475 0.497901 0.578135 0.101558 1.652967 1.679874 0.125134 0.500536 0.578328 0.102586 10 11 1.657165 1.676379 0.124868 0.499470 0.577543 0.101463 12 1.660149 1.673939 0.125302 0.501208 0.577737 0.102104 1.662241 1.672237 0.125255 0.501019 0.577429 0.101607 13 1.663749 1.671024 0.125520 0.502077 0.577545 0.101945 14 1.664839 1.670157 0.125709 0.502838 0.577611 0.102143 15 16 1.665627 1.669533 0.125769 0.503081 0.577561 0.102044 17 1.666197 1.669082 9.125714 0.502858 0.577397 0.101673 18 1.666621 1.668751 0.126053 0.504229 0.577697 0.102377 1.666932 1.668509 0.126134 0.504542 0.577723 0.102410 19 20 1.667160 1.668332 0.126116 0.504453 0.577644 0.102203

# THIS CASE HAS PARAMETERS AS FOLLOWS

C1 = 1.0 C2 = 4.0 ALPHA = 0.20 BETA = 0.20

#### THE RESULTS OF THIS CASE ARE

PROBABILITY OF THE LVENT R(K) REJ/H1 ACC/H1 REJ/H2 ACC/H2 0.912961 3.092629 0.117227 0.468906 0.585136 0.146324 1 2 1.509713 2.102036 0.308315 1.238133 1.311424 0.327344 1.665699 1.931966 0.147677 0.591547 0.615764 0.153756 4 1.732622 1.866752 0.146423 0.587899 0.606949 0.151491 5 1.765132 1.836678 0.146838 0.587338 0.603636 0.150984 6 1.781833 1.821688 0.146641 0.586561 0.601204 0.150100 7 1.790909 1.813720 0.146731 0.586922 0.600018 0.149991 1.795965 1.809330 0.146635 0.586541 0.599087 0.149309 8 9 1.798905 1.806820 0.146957 0.587828 0.598894 0.150041 10 1.800611 1.805370 0.146858 0.587426 0.598404 0.149425 11 1.801627 1.804513 0.146950 0.587792 0.598232 0.149503 12 1.802233 1.804002 0.146830 0.587325 0.597914 0.148900 13 1.802605 1.803692 0.147128 0.588500 0.598082 0.149758 14 1.802833 1.803503 0.147194 0.588798 0.598049 0.149881 15 1.802972 1.803388 0.147053 0.588234 0.597847 0.149255 16 1.803058 1.803317 0.147254 0.588990 0.597933 0.149838

# REFERENCES

- [1] Barr, D. R., "Two Sequential CEP Tests," Naval Postgraduate School Technical Report NPS55Bn74061 (1974).
- [2] Barr, D. R., and M. F. Jordan, "A Power Distribution Model for Weapon Accuracy," Naval Postgraduate School Technical Report NPS55Bn74011 (1974).
- [3] Gavlak, M. W., "An Examination of the Wald Stopping Bounds for the Sequential Probability Ratio Test," Naval Postgraduate School Thesis, (1970).
- [4] Harter, H. L., "Circular Error Probabilities," J. Amer. Statist. Assoc., 55, 161-165 (1967).
- [5] Mastran, D., "An Application of the Cauchy Distribution to Bombing Accuracy," Air Force Operations Analysis Headquarters Paper 70-5, (1970).
- [6] Cox, C. P. and T. D. Roseberry, "A Note on the Variance of the Distribution of Sample Number in Sequential Probability Ratio Tests," <u>Technometrics</u>, <u>8</u>, No. 4, 700-704 (1966).
- [7] Sarhan, A. E., and B. G. Greenberg, <u>Contributions to Order Statistics</u>, John Wiley & Sons, New York (1962).
- [8] Wald, A., Sequential Analysis, John Wiley & Sons, New York (1947).

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